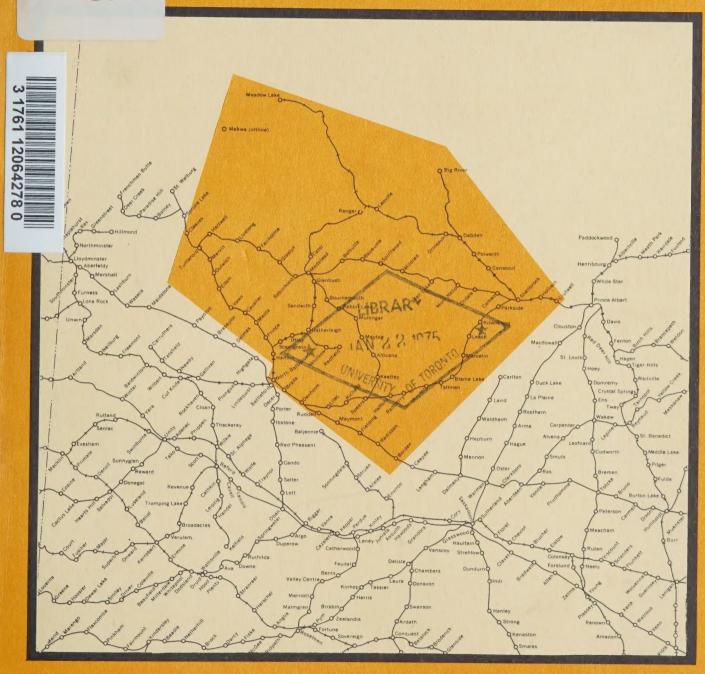
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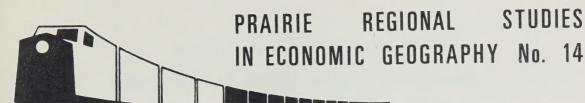
### SHELLBROOK-TURTLEFORD REGION SASKATCHEWAN

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# THE SHELLBROOK - TURTLEFORD REGION OF SASKATCHEWAN

H.R. FAST, D.A. NEIL ECONOMICS BRANCH AGRICULTURE CANADA REGINA, SASKATCHEWAN



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- The Riverhurst Region of Saskatchewan by A.W. Burges, Geographical Branch, Department of Energy, Mines and Resources; and J.W. Channon, Economics Branch, Canada Department of Agriculture. (Supplement to Riverhurst Regional Report, September, 1967) Out of print.
- The Boissevain Region of Manitoba by J.W. Channon, D. Zasada and R.T. Miller, Economics Branch, Canada Department of Agriculture. Out of print.
- 3. The Rockglen Region of Saskatchewan by J.W. Channon, D. Zasada and R.T. Miller, Economics Branch, Canada Department of Agriculture, Pub. No. 69/11, August, 1969. Out of print.
- 4. The Camrose-Vegreville Region of Alberta by J.W. Channon and D. Zasada, Economics Branch, Canada Department of Agriculture, Pub. No. 69/16, November, 1969. Out of print.
- The Weyburn Region of Saskatchewan by J.W. Channon, H.R. Fast and D.A. Neil, Economics Branch, Canada Department of Agriculture. Pub. No. 71/4, May, 1971. Out of print.
- The Killarney Region of Manitoba by J.W. Channon, D. Zasada and K. Morison, Economics Branch, Canada Department of Agriculture. Pub. No. 71/7, May, 1971. Out of print.
- 7. The Eston-Elrose Region of Saskatchewan by J.W. Channon, H.R. Fast and D.A. Neil, Economics Branch, Canada Department of Agriculture. Pub. No. 71/12, November, 1971. Out of print.
- 8. The Brandon-Neepawa Region of Manitoba by J.W. Channon and K.J. Morison, Economics Branch, Agriculture Canada. Pub. No. 71/15, March, 1972.

- 9. The Cardston Region of Alberta by J.W. Channon and K.J. Morison, Economics Branch, Agriculture Canada. Pub. No. 72/3, July, 1972.
- 10. The Rosthern Region of Saskatchewan by J.W. Channon, H.R. Fast and D.A. Neil, Economics Branch, Agriculture Canada. Pub. No. 72/6, October, 1972.
- 11. The Tisdale Region of Saskatchewan by H.R. Fast and D.A. Neil, Economics Branch, Agriculture Canada. Pub. No. 73/4, February, 1973.
- 12. The Melfort-Wakaw Region of Saskatchewan by H.R. Fast and D.A. Neil, Economics Branch, Agriculture Canada. Pub. No. 73/5, May, 1973.
- 13. The Virden Region of Manitoba by H.R. Fast and K.J. Morison, Economics Branch, Agriculture Canada. Pub. No. 73/8, June, 1973.
- 14. The Shellbrook-Turtleford Region of Saskatchewan by H.R. Fast and D.A. Neil, Economics Branch, Agriculture Canada, Pub. No. 73/17, September, 1973.

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Bill C-120 was given first reading in the House of Commons on September 14, 1964. This was the first attempt to implement the recommendations of the MacPherson Royal Commission on Transportation. It never became law as the twenty-sixth parliament was dissolved before the bill passed through the Commons. That bill would have established the Branch Line Rationalization Authority, responsible to the Minister of Agriculture.

Bill C-231, which succeeded Bill C-120, was given first reading on August 29, 1966, and subsequently became what is now in the statutes as the National Transportation Act, R.S.C. 1970 Ch. N-17. This bill established the Canadian Transport Commission, comprising several committees, including the Railway Transport Committee. This latter committee was allocated the responsibilities which would have been given to the Branch Line Rationalization Authority. The Railway Transport Committee is responsible through the Canadian Transport Commission to the Minister of Transport. Accordingly the Minister of Agriculture now has no direct authority in the field of branch line abandonment. However, because of the responsibilities of the Canadian Grain Commission in regulating the grain warehouse industry, the Minister of Agriculture has a direct interest in the impact of branch line rationalization on this railway-related industry. He also is concerned, of course, with the effects of such changes on the welfare of western grain producers.

Prairie Regional Studies in Economic Geography had their origin in work carried out by Mr. J.W. Channon for the Minister of Agriculture, beginning in February 1964. Later that year Mr. A.W. Burges began a study of the prairie branch line network for the Geographical Branch, Department of Mines and Technical Surveys. It seemed logical and economical to merge the two. This was done and the Riverhurst report became No. 1 in the series of Prairie Regional Studies. Following the dissolution of the Geographical Branch in 1967, the project was wholly transferred to the Canada Department of Agriculture and work continued under the direction of Mr. Channon. The present report on the Shellbrook-Turtleford region of Saskatchewan is No. 14 in this series.

The area designated as the Shellbrook-Turtleford region of Saskatchewan comprises 69 grain delivery points. These are first listed in Table 1.1 and again in subsequent tables as required. The factors given consideration when delineating a study region for purposes of this series include the following: (1) that the region must be a manageable size; (2) that the region must encompass one or more problem areas with regard to grain marketing; (3) that an attempt is made to draw a line around the region such that communities outside the region are not affected by the rationalization hypothesized in the study in terms of grain delivery patterns, i.e., if possible no community is to be in more than one study region; and (4) that the region and the problem areas are to be based

on the railway network and country elevators existing at the time of delineation.

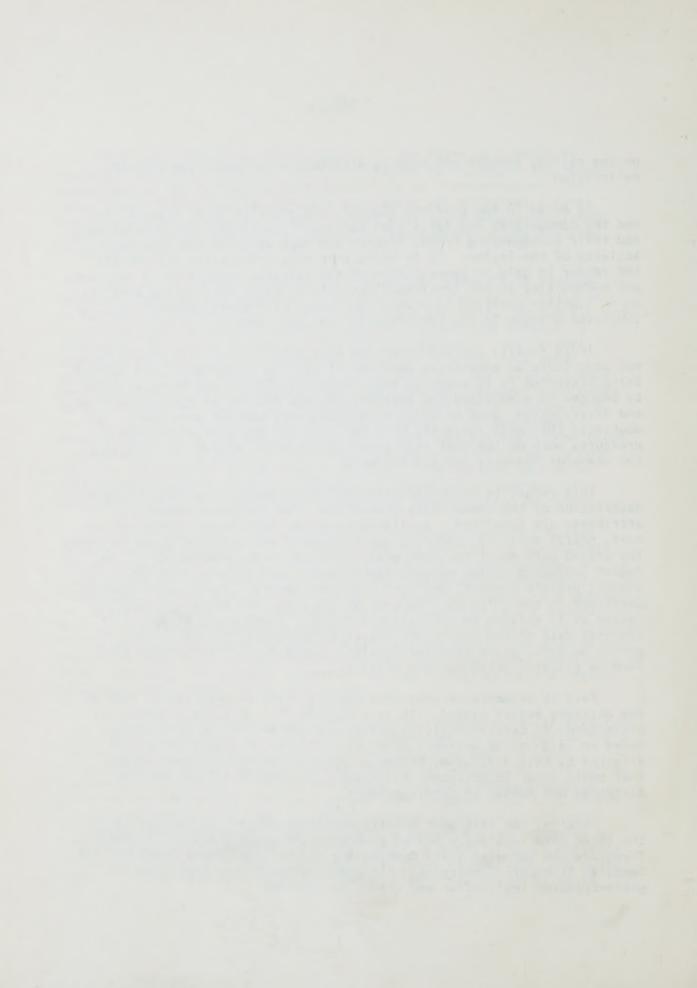
As noted in the previous reports, the emphasis is on grain farms and the communities and facilities serving these farms. The tabular data and their accompanying texts, figures and maps describe the socio-economic activity of the region. It is hoped that this information will enable the reader to gain an appreciation of the relative importance of the farms and communities in the Shellbrook-Turtleford region and, having done this, be in a better position to assess the impact of proposed programs and contemplated changes in the infrastructure of the region.

It is readily admitted that the data contained in this report do not constitute an exhaustive coverage of all the parameters. The material being presented is intended to help those individuals and firms affected by changes to understand the rationale of any changes in grain collection and distribution, some of which have been under way for some years. Undoubtedly this will intensify over the next few years as inflationary pressures work on the cost structures of the grain production industry, the elevator industry and the railways.

This report is organized into five major parts, the first being a description of the communities themselves. The following community attributes are described: available services, population, school enrolment, postal activity, property tax assessment and transportation services. The second part describes some grain production characteristics of the region including soils, meteorological data, land values, land use, crop yields, protein content, and farm sizes and tenure. Descriptive material contained in the third part focuses on the grain marketing and handling system as it relates to the delivery points. Among other things, this includes data on the number and capacity of grain elevators, number of permit holders, grain elevator receipts, quota base, grain prices and farm to elevator grain hauling activity.

Part IV attempts to show what changes might be expected if some of the delivery points closed. It is a hypothetical exercise in which the hinterlands of certain delivery points assumed closed are diverted and added to neighboring delivery point hinterlands. For delivery points affected by this diversion, estimates are made of the probable changes that could occur in acreages, bushelages, throughput ratios, hauling distances and number of permit holders.

Finally, the last part briefly describes some of the activities of the three main regulatory bodies governing the grain industry in Canada. These are the Canadian Grain Commission, the Canadian Wheat Board and the Canadian Transport Commission. For added perspective a chronology of grain-oriented legislation and events is appended.



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#### PART I

#### COMMUNITY CHARACTERISTICS

#### Classification of Communities

For purposes of this study, the method of community classification is based on a modification of the system used by the Saskatchewan Royal Commission on Agriculture and Rural Life in their Report No. 12 entitled "Service Centers". The criterion used for classifying and ranking communities in the present study was the number of service activities present. Communities were classified by number of services into five categories: "too small to classify", 0-2 services; hamlets, 3-10 services; villages, 11-35 services; towns, 36-75 services; and greater towns, 76 or more services. If two or more communities had an equal number of services, they were then ranked by population. North Battleford was placed in a sixth category, cities, by virtue of its large number of services and its large population.

This method of ranking is not perfect. For instance, it ignores dollar volume of retail sales in each community and it does not take into account the quality of service activities present. It appears, however, to be more meaningful than simply to rank by population.

Table 1.1 lists the communities in ascending order of rank. There were 17 communities "too small to classify", 20 hamlets, 17 villages, 11 towns, 3 greater towns and 1 city. The number of services in each community, as shown in Tables 1.2A and 1.2B, served as the basis for the service classification and the initial ranking within each class. Where information was available, 1971 population figures were used to rank by population (Table 1.4).

The type and number of services shown for each delivery point other than grain elevators may not be completely accurate. This information was gleaned from a visual field survey and it was supplemented by telephone directories and by other data on grain elevators, post offices, schools, railway stations, bus depots, etc. It is possible that some services were overlooked such as a door-to-door salesman or a beauty parlour that was located in the basement of a private home. Sometimes it was difficult to know whether a particular business or meeting hall was being used or whether it was abandoned.

As a working definition of "service" with respect to grain elevators, the following criterion was used. The number of grain elevator companies actively receiving grain from producers on either a part or a full-time basis during the 1971-72 crop year were counted. This meant that the

mere presence of a licensed elevator facility was not counted as a service if it was only used for storage. Furthermore, in those instances where an elevator company had more than one elevator at a particular delivery point, it was still considered to be just one service.

Figure 1.1 shows the classification of communities and their geographic location in the Shellbrook-Turtleford study region.

Tables 1.2A and 1.2B clearly show the number and kind of services available in the various communities. Of the 17 delivery points "too small to classify", 6 had no services, 3 had 1 service and 8 had 2 services. Only 6 delivery points had grain elevators that were open. Five delivery points had postal boxes, 5 had a small general store or a grocery store, 2 had a fertilizer dealership associated with the grain elevator and 1 delivery point, Redberry, had a bulk fuel dealer.

The principal services in hamlets were the grain elevator with its associated fertilizer dealership, the small general store, the meeting hall and the postal service. Six of the hamlets had rinks, 3 had schools and 2 had bulk fuel dealerships.

Villages provided similar services with the main additions being a garage or service station, a farm equipment dealer, a hotel, a bank and a railway station. All villages had postal services and all except 4 had schools. However, such services as a clothing store, an electrician and a doctor were absent.

Virtually the complete range of services was available in towns and greater towns. While only one establishment of the same kind was located in a village, in a town there were often two or more similar establishments. Some degree of specialization becomes evident. For instance, one may find a bakery as well as a grocery store and an appliance sales and service store as well as a hardware store. There may also be other specialized services such as dentists, drive-in eating establishments, trailer courts and ambulance services that are not itemized in Table 1.2B.

TABLE 1.1 CLASSIFICATION OF COMMUNITIES IN THE STUDY AREA®

Cities	69 North Battleford
Greater Towns 76 or more Services	66 Spiritwood 67 Shellbrook 68 Meadow Lake
Towns 36-75 Services	55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 60 Canwood 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford 65 Leask
Villages 11-35 Services	38 Whitkow 39 Mullingar 40 Holbein 41 Parkside 42 Makwa 43 Livelong 44 Vawn 45 Krydor 46 Medstead 47 Speers 48 Mayfair 49 Maymont 50 Mervin 51 Meota 52 Shell Lake 53 Rabbit Lake
Hamlets 3-10 Services	18 Hatherleigh 19 Redfield 20 Hamlin 21 Crutwell 22 Cavalier 23 Keatley 24 Bapaume 25 Robinhood 26 Fairholme 27 Sandwith 28 Mildred 29 Belbutte 30 Prince 31 Richard 32 Denholm 33 Ruddell 34 Alticane 35 Glenbush 36 Fielding 37 Mont Nebo
Too Small to Classify 0-2 Services	l Hartwell 2 Cameo 3 Bournemouth 4 Dulwich 5 Cleeves 6 Ormeaux 7 Ordale 8 Tallman 9 Kilwinning 10 Redberry 11 Scentgrass 12 Polwarth 13 Cater 14 Brada 15 Lilac 16 Iffley

 $^{\it a}$  For purposes of cross-reference, see "Alphabetical List of Communities and Rank Number" in the Appendix.

TABLE 1.2A SERVICES PRESENT IN COMMUNITIES TOO SMALL TO CLASSIFY, 1972

		Number		
Deli	ivery Point	Service		Other Services
Too	Small to Class	sify (0-2)		
٦	Hartwell	Nil	(Storage Only 1959-60 to 1963-64 Closed August, 1964)	
2	Cameo	Nil	(Storage Only 1958-59 to 1965-66 Closed August, 1966)	
3	Bournemouth	Nil	(Emptied and Closed During 1970-71 Crop Year)	
4	Dulwich	Nil	(Closed August, 1966)	
5	Cleeves	Nil	(Closed August, 1967)	
6	Ormeaux	Nil	(Closed August, 1967)	
7	Ordale	1	(Closed August, 1970)	Group postal boxes
8	Tallman	1	Sask. Wheat Pool	
9	Kilwinning	1	(Storage Only 1957-58 to 1964-65 Closed August, 1965)	General store
10	Redberry	2	(Storage Only 1968-69 to 1970-71 Closed August, 1971)	Grocery store, Bulk fuel dealer*
11	Scentgrass	2	Sask. Wheat Pool	Fertilizer dealer
12	Polwarth	2	National Grain Ltd.	Grocery store
13	Cater	2	(Storage only 1968-69 to 1970-71 Closed August, 1971)	Grocery store, Group postal boxes
14	Brada	2	Sask. Wheat Pool	Fertilizer dealer
15	Lilac	2 .	Sask. Wheat Pool	Group postal boxes
16	Iffley	2	Sask. Wheat Pool	Group postal boxes
17	Ranger	2	(Emptied and Closed During 1970-71 Crop Year)	General store, Group postal boxes

<sup>\*</sup>Dealer has gas pumps.

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	Other Specialized Services					2								-			-	m	9		- ~	m-	44	
	Air Field	$\perp$	1							Ш	$\perp$			-	11			+++	+	-				
TRANSPORTATION	Truck Transport Co.	+	#	-				+	-	Ш			H	+	+						- 2			Н
TAT	formula 3.T.C. Bus Depot	+	+	++		111	-		-		+							H						Н
POR	Road Maintenance Depot Railway Station	++	+	++-	-	+++	Н	+	++	Ш	+	++	H					+		~ ~ ~				++-
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-	Funeral Home	+	++-	++		+++	++			Н			++	+	-		+++	1-++	++-		+			
	Law Office		++	++-		+++	++-			Н		++	++		-	+++	+++	+++	++-	H	+			-
1	Shoe Repair		++-	++		+++	++			Н		+	++-	+	+	++	+++	+++	+	+++	++	HH		+
ŀ	Locker Plant		++	++	-	111	+-			H			$\mathbb{H}$	H	+		++++		-		+			
CES	Theatre	-	+	++	-	+++	++-	Н		Н		11			+	+++			-	ш	1		-	
SERVICES	Electrician		+	+			#			Ш			$\forall \vdash$		11	++		111	-	-				
	Construction Contractor		++							Ш						Ш				-			-	1
COMMERCIAL	Blacksmith/Welding						-															-	2	
8	hobnev Yendor			1											-	-		1	-					-
8	fetoM																				Ш			e.
_	Hotel/Beverage Room				-				-	-										FF				- E
	Laundry/Dry Cleaning									Ш								-	11	-	11			00
	Pool Room	$\perp \downarrow \downarrow$	4	11		$\perp \downarrow \downarrow$	1			Ш		4	-				111		-					g.
	Barber	$\perp$	4	11		$\sqcup \sqcup$	1	$\sqcup$		Ш	$\Box$		1					-	pro		1			- >
	Beauty Parlour		1	11		$\downarrow \downarrow \downarrow$	+			Ш						111		444	+	FF	-2-	-2		- 0
	Auto Body Repair	$\rightarrow$	+	+		+++	++-			Ш	$\square$	-	-		-	1		+++	++					
	Auto Dealer	$\rightarrow$	-	+		+++	-	1		Ш	$\square$		++-			17		+++	++-		2		2/0	hown
	Plumbing & Heating	+	-	++		+++	++-	-		Н	$\mathbb{H}$		-		++	+++		+			-			- 5
	Разграсу 2001	$\dashv$	++-	+		+++			H	++		+	++		7	+++	++++	+	+	+H				0 [a
	Furniture Store Clothing Store	$\dashv$	++	+		+++	++	$\vdash$		++	$\mathbb{H}$		-		++	+		+	++-	++				+
	Lumber Yard	+	+	++	+++	+++	+	++-		$\mathbb{H}$			+			+++	++++							Hi-
	Appliance Sales/Service	-++	++	+	1		+		H	Н				+	++	+++	1771							E C
ы	Restaurant/Cafe		++	+		+++	++	++		H	Н		++-	H					-		222		et c	3
TRADE	Вакету		++	++		+++	++	++		+	Н		-							Н				Sha
AIL 7	Tire & Battery	$\rightarrow$	++			+++	+	+			H						1111							12
RETA	Jnamqiup3 mas3		++	++	++	111	++	+					+		~				-   ~	4-6	22		me	. Sn
~	Hardware Store	$\rightarrow$	++	++	+++	+++	+			$^{+}$			+	-	-					200	- ~ ~	-2	200	
	Bulk Fuel Dealer		+	$\top$	+++		#	+	$\Box$			2	- 2	_	2 - 0	,	-222	m,	- 2/5	200	m 4 c	22	No	nu
	Garage		++		$\Box$	111	1	$\Box$		+			1		2 -	7	m ~ m	0	2 2	Nm.		mm	.7 <	00
	Service Station		11		H			H	2 -			2 -	2	-	-	-2	- 2			m-	200		-	9
	Grocery Store		7	+							-		~	-	2 2 -				- = 2	2-	-20	-2	m	a a
	General/Confectionary Store		-11		- ±	+			27	+		- <del>-</del>	÷	<u>+</u> _	-		3-1-15		V =			2	7 6	ce
	Feed/Seed Farm Supply							П					-		2						$\vdash$		-	erv
	rentilizer Dealer		H			~				-		2	7 ~	2 -	- 2		2-22	2	NNM	200	m 4 -	N M	me	
1 × 1	Livestock Loading												-		-						-			U
FARM PROD. ASSEMBLY	Seed Cleaning Plant		$\prod$	П			II	$\prod$	Ш	Щ		Ш			Ш				H	Ш				upe
ASS	Grain Elevator Co.	-	- 2			-	2 -	~~	-20	1-	-	- 2	7 -	2/2	-2-	- - -	-222	-	- 00	nn	nm-	200	20	N
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	Delivery Point	-10 lei	Pl C	er I	pood	타	te.	E	34 Alticane 35 Glenbush 36 Fielding	epo	(23-	ngar	ng de		pad	4	51 Meota 52 Shell Lake 53 Rabbit Lake 54 Marcelin	75)	9	E P	E 0	for	treater Towns (76 or More, 66 SpiritWood	5 2
	2	her	Lil.	rali +	The same	dre	nce	holidel	rice	t l	tko	Del i	KWa o	rdor,	dste	V in	ell obit	ns (35-75) Debden	rder.	Radisson	Glaslyn Hafford Rin Diwe	rti	T T	ado
	ver	Hat	Rec	Cay	Rob	Sar	Pri	Per	A]	Mor	Mh	문	Mal	Va)	Spe	Me	She Rat	Dec	18 E		Ha		Sp	Me
	-	E 80	60	2/2/2	22	00 70	500	325	2 2 2	200	700	00	- 200	45	000	000	23.22	55 55	57 28	200	1000	55	200	88

\*Store with gas pumps.

\*Store with gas pumps.

\*Storage only 1970-71, closed Aug., 1971.

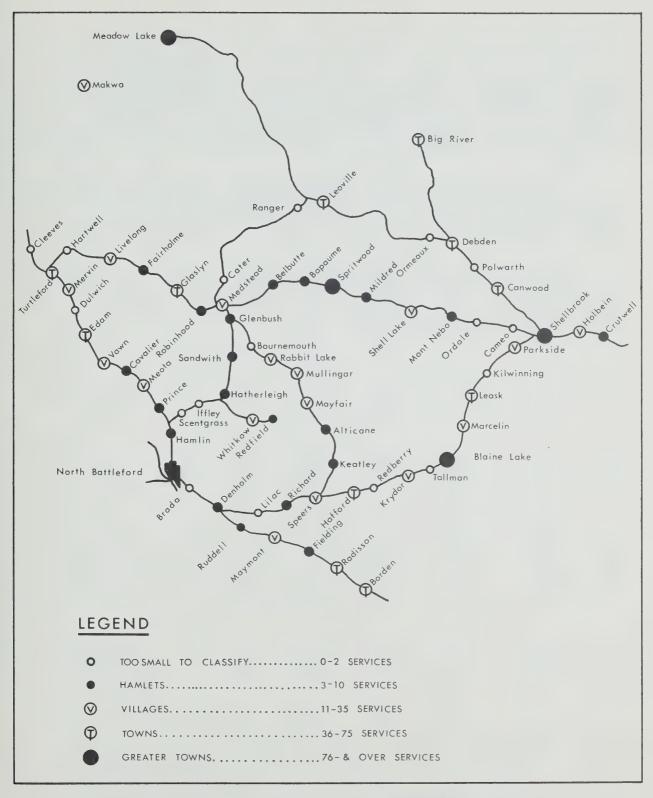
\*Storage only 1968-69 to 1797-71, closed Aug., 1971.

\*Storage only 1969-70 and 1970-71, closed Aug., 1971.

\*Storage only 1970-71, closed Aug., 1971.

Source: Field survey, telephone and trade directories.





CLASSIFICATION OF COMMUNITIES THE SHELLBROOK - TURTLEFORD REGION OF SASKATCHEWAN, 1972

#### Retail Trade

Only a limited amount of information on retail trade in the study area was available; therefore it could not be used in the ranking process. Table 1.3 shows the retail sales volume of each incorporated community in the census years of 1961 and 1966. The number of outlets reporting in a community often does not account for all retail outlets actually operating there.

In general, retail sales volume increased with the ascending order of community rank; however, there was considerable variation. It must also be remembered that the ranking was established on a 1972 basis, while the data on retail sales applies to periods six and eleven years earlier.

Between 1961 and 1966 the average volume of sales per retail outlet increased in all communities listed in the table except Vawn, Marcelin, Leoville, Borden, Glaslyn and Leask. No information was available for other delivery points in the area.

TABLE 1.3 RETAIL TRADE OF INCORPORATED COMMUNITIES IN THE STUDY AREA, 1961 AND 1966

		1961	,	1966						
		Retail			Retail	Sales				
Delivery Point	No. of Outlets	Total	Per Outlet	No. of Outlets	Total	Per Outlet				
Hamlets		-\$00	0's -		- \$00	00's -				
31 Richard 36 Fielding	3 3	63 68	21 23	1 2	n.a. n.a.	-				
Villages 41 Parkside 44 Vawn 45 Krydor 46 Medstead 47 Speers 49 Maymont 50 Mervin 51 Meota 52 Shell Lake 53 Rabbit Lake 54 Marcelin	4 3 9 3 2 6 4 7 7	114 133 176 88 136 n.a. 129 211 284 165 407	29 44 20 29 45 - 22 53 41 24	4 3 7 5 2 5 5 4 6 5 7	227 126 181 288 n.a. 229 130 513 346 248 597	57 42 26 58 - 46 26 128 58 50 85				
Towns 55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford 65 Leask	8 8 5 4 14 6 13 9 11	865 321 224 221 487 1,130 675 597 805 664	108 40 45 55 35 188 52 66 73 66	6 7 3 12 7 11 10 12	1,776 226 279 232 533 882 634 999 904 633	296 38 40 77 44 126 58 100 75 58				
Greater Towns 66 Spiritwood 67 Shellbrook 68 Meadow Lake	15 14 49	1,011 1,225 4,081	67 88 83	19 18 49	2,292 1,908 6,785	121 106 139				
Cities 69 North Battleford	123	18,243	148	114	27,840	244				

n.a. - Not available.

Source: <u>Census of Canada</u>, Statistics Canada, Ottawa.

#### Population of Communities

Between 1956 and 1971, the directions and percentages of change for populations in the different classification groups were as follows: "too small to classify", -74.5 percent; hamlets, -44.1 percent; villages, +4.7 percent; towns, +3.8 percent; and greater towns +33.8 percent. The increase from 20,901 to 25,401 in the number of people residing in communities was largely due to a 39.5 percent increase in the population of North Battleford. In 1956 this city accounted for 43.7 percent of all people in the communities of the study area; but, by 1971, 49.0 percent of the total population in the different classification groups lived there.

#### Farm Population

The study area encompasses about 17 rural municipalities and 3 local improvement districts. These are listed in Table 1.5 along with figures showing the number of persons living on census farms.  $^{\mathcal{I}}$  Between 1941 and 1966, the population on farms fell by 45.4 percent in the province and by 33.9 percent in the study area.

The combined effects of a substantial drop in farm population and an increase in total population resulted in the proportion of persons on farms in Saskatchewan declining from 57.4 percent in 1941 to 29.4 percent in 1966, a period of 25 years. The proportion of persons on farms in the study area in 1966 was 43.1 percent. This data illustrates the familiar movement of people from rural to urban residence.

In 1966 the term "census farm" was defined as an agricultural holding of one acre or more with sales of agricultural products amounting to \$50 or over during the 12-month period prior to the census. See Agriculture Census of Canada, 1966.

<sup>&</sup>lt;sup>2</sup>Based on a total population of 48,136 in the study area, as shown in Table 1.6.

TABLE 1.4 POPULATION OF COMMUNITIES IN STUDY AREA, CENSUS YEARS 1941 TO 1971

Delivery Point	1941	1951	1956	1961	1966	1971
Too Small to Class	sify					
1 Hartwell	***	2				
2 Cameo	4	• • •				
3 Bournemouth	3	9	10	4	3	
4 Dulwich	12	8	9	25	_	2
5 Cleeves 6 Ormeaux	49 12	29 13	17 10	25 12	5 5	3
7 Ordale	16		17		6	• • •
8 Tallman	9	14	9	12	9	6
9 Kilwinning	27	30	39	24	19	9
10 Redberry	10	10	9		4	
11 Scentgrass	17	14	15	• • •	·	
12 Polwarth	17		6	• • •	2	
13 Cater		11	6	2		
14 Brada		12	13	10		
15 Lilac	14	7	8	9	5	6
16 Iffley	15	15	15	11	10	9
17 Ranger	15	12	13	12	12	17
Hamlets						
18 Hatherleigh	24	23	25	12	5	6
19 Redfield	27	26	32	21	10	6
20 Hamlin	13	15	16	5	16	7
21 Crutwell	15	53	89	115	116	71
22 Cavalier	20	12 14	11 17	14 11	9 7 -	
23 Keatley 24 Bapaume	15 33	34	17	23	23	6 28
24 Bapaume 25 Robinhood	52	32	34		23	18
26 Fairholme	71	44	59	58	50	51
27 Sandwith	45	27	35	44	17	5
28 Mildred	99	53	58	44	68	54
29 Belbutte	27	37	68	47	41	38
30 Prince	64	58	69	66	43	29
31 Richard	137	96	101	91	53	39
32 Denholm	95	94	104	72	79	71
33 Ruddell	62	53	61	100	39	25
34 Alticane	67	57	67	56	67	24
35 Glenbush	52	47	58	56	55	30
36 Fielding	70	83	78	82	52	38
37 Mont Nebo	• • •	84	70	34	65	53
Villages						
38 Whitkow	57	45	56	49	36	23
39 Mullingar	40	41	29	42	38	33
40 Holbein	36	58	36	7.40	53	40
41 Parkside	159	134	125	149	128	112
42 Makwa	66 79	175	n.a. 108	n.a. 140	156 <sup>a</sup> 165	126 126
43 Livelong 44 Vawn	78 59	138 64	74	102	137	116
45 Krydor	134	130	169	184	157	136
46 Medstead	188	188	202	199	179	179
47 Speers	145	127	155	175	163	117
48 Mayfair	62	83	, 74	95	114	134

TABLE 1.4 POPULATION OF COMMUNITIES IN STUDY AREA, CENSUS YEARS 1941 TO 1971 (concluded)

Delivery Point	1941	1951	1956	1961	1966	1971
49 Maymont 50 Mervin <sup>b</sup> 51 Meota 52 Shell Lake 53 Rabbit Lake 54 Marcelin	205 196 224 132 172 257	174 202 237 239 142 247	197 207 240 258 197 267	239 193 281 141 196 280	191 231 267 264 218 305	168 198 231 254 206 307
Towns 55 Debden <sup>b</sup> 56 Leoville <sup>b</sup> 57 Borden 58 Edam <sup>b</sup> 59 Radisson <sup>b</sup> 60 Canwood 61 Glaslyn <sup>b</sup> 62 Hafford <sup>b</sup> 63 Big River <sup>b</sup> 64 Turtleford 65 Leask <sup>b</sup>	184 166 179 349 232 153 342 513 275 251	278 329 <sup>a</sup> 194 230 402 272 185 351 901 280 306	379 397 208 264 500 310 250 453 904 367 412	402 416 208 277 515 311 269 511 896 352 499	401 367 210 310 489 342 349 587 898 429 497	344 391 187 333 414 325 355 585 824 419 437
Greater Towns 66 Spiritwood <sup>b</sup> 67 Shellbrook <sup>b</sup> 68 Meadow Lake <sup>b</sup>	218 489 971	355 649 1,956	488 907 2,477	548 1,042 2,803	622 1,088 3,375	719 <sup>c</sup> 1,034 3,426
Cities 69 North Battleford <sup>b</sup>	4,745	7,473	8,924	11,230	12,262	12,453
Province of Saskatchewan	12,485	17,713 831,728	20,901 880,665	23,916 925,181	25,946 955,344	25,401 926,245

<sup>...</sup> No acceptable figures could be established.

A blank space means no population figures were reported.

Source: Census of Canada, Statistics Canada, Ottawa.

n.a. - Figures not available.

<sup>&</sup>lt;sup>a</sup>Incorporations: Makwa in 1965 from L.I.D. 983; Leoville in 1944 from

L.I.D. 526.

Annexations to towns and villages: Mervin in 1962 from 499. Mervin;
Debden in 1964 from 494. Canwood; Leoville in 1955 and 1958 from 496.
Spiritwood; Edam in 1965 from 469. Turtle River; Radisson in 1959 from 405. Great Bend; Glaslyn in 1961 from 498. Parkdale; Hafford in 1954 from 493. Shellbrook and in 1962 from 435. Redberry; Big River in 1948 from L.I.D. 555; Leask in 1957 from 464. Leask; Spiritwood in 1945 from 496. Spiritwood; Shellbrook in 1953 from 493. Shellbrook; Meadow Lake in 1942, 1947 and 1949 from L.I.D. 588, and in 1966 from L.I.D. 980;
North Battleford in 1958 from 437. North Battleford.

Change in boundary since June 1, 1966.

TABLE 1.5 FARM POPULATION IN THE STUDY AREA BY RURAL MUNICIPALITY, CENSUS YEARS 1941 TO 1966

Rural Municipality	1941	1951	1956	1961	1966
Census Division #16 405. Great Bend 406. Mayfield 434. Blaine Lake 435. Redberry 436. Douglas 437. North Battleford 464. Leask 466. Meeting Lake 467. Round Hill 493. Shellbrook 494. Canwood 496. Spiritwood 497. Medstead 974. L.I.D.a 986. L.I.D.	1,990 1,363 2,419 3,155 1,778 1,745 1,962 1,988 1,707 1,915 1,685 1,999 1,859	1,309 1,102 1,580 2,138 1,189 1,322 2,243 1,642 1,090 2,361 1,439 1,180 1,323 800	1,149 977 1,416 1,855 1,095 1,243 1,816 1,387 992 2,176 3,298 2,880 1,099 690	948 891 1,365 1,617 982 1,303 1,552 1,067 937 1,828 2,829 2,310 925 519	897 724 774 1,045 925 991 1,219 886 697 1,595 2,665 2,194 990 519
Census Division #17 468. Meota 469. Turtle River 498. Parkdale 499. Mervin 980. L.I.D.	1,508 1,152 1,644 1,500	1,134 890 1,104 1,200 1,640	1,074 823 1,368 1,050 1,630	964 601 1,063 879 1,380	889 640 984 861 1,235
Study Area Total	31,369	28,178	28,018	23,960	20,730
Farm Population of Saskatchewan	514,677	399,473	362,231	305,740	281,089

L.I.D. - Local Improvement District.

Source: Census of Canada, Statistics Canada, Ottawa.

<sup>&</sup>lt;sup>a</sup>All three L.I.D.'s were formed in 1949. L.I.D. 986 was annexed to L.I.D. 980 in 1969.

#### Population by Sex and Age Groups

Tables 1.6 and 1.7 contain 1966 Census population data for the incorporated communities and rural municipalities that make up the study area. Provincial totals are also shown. In both the study area and the province, there were more males than females. For the province 51.2 percent of the population were male and for the study area 51.8 percent were male.

The 20 to 64 age group closely represents the effective working population (Table 1.7). It comprised 47.9 percent of the population in the province and 46.3 percent of the population in the study area. A significantly larger proportion of persons in the retired age group lived in incorporated communities than on farms or in unincorporated communities. For the other age groups, the proportions of people living in incorporated centers and in rural areas were about the same.

POPULATION BY SPECIFIED AGE GROUPS AND SEX FOR INCORPORATED COMMUNITIES AND RURAL MUNICIPALITIES IN THE STUDY AREA, 1966 TABLE 1.6

							Years of	of Age					1
		Total	0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	69-69	/U and over
Incorporated Communities 32 Denholm M. F.	munities T. M. F.	79 43 36	100	<b>∠</b> 84	13	ហ m ល	2	<b>∠</b> 84	-123	12 5	974	m 70 m	നവയ
33 Ruddell	 ΈΣΨ	39 17 22	7 1 9	000	000	9 7 4	82-	000	352	422	123	1 - 1 - 2	624
36 Fielding	ĿΣĽ	52 32 20	112	3 2 21	7 7 0	2 2 2	000	0	2 - 4	യവയ	900	153	
41 Parkside	⊢Σ¤.	128 63 65	<b>∠</b> ε4	ဖက္က	12 6	თდო	0	350	12 5	11 4 7	17 4 13	12 6	30
42 Makwa	 ⊢Σμ	156 82 74	14	18	21 14 7	16 8 8	400	0104	16	12 8	15 8 7	7 4 8	24 12 12
44 Vawn	-Σμ	137 71 66	13	21 13 8	17	12 2 01	12 8 4	18 7 11	14 6	13	നവയ	-0-	8 7 1
45 Krydor	 ⊢Σμ	157 79 78	134	m 0 m	10 6 4	V 4 E	400	200	10 7 3	18	33	17 10 7	40 19 21
46 Medstead	⊢Σ'n	179 93 86	13	27 12 15	21 12 9	14	N W W	22 7 15	14 6	20	21 15 6	844	14 4
47 Speers	ĿΣĽ	163 79 84	14	14	901	11 5	10	178	13	29	13	844	14 7
See footnotes at	end of table	able										(con	(continued)

POPULATION BY SPECIFIED AGE GROUPS AND SEX FOR INCORPORATED COMMUNITIES AND RURAL MUNICIPALITIES IN THE STUDY AREA, 1966 (continued) TABLE 1.6

70 and	over	24 16 8	32 21 11	38 23 15	35 18 17	37 23 14	<u> </u>	28 15	26 13 13	29	( point; +
	69-59	15	- o c	15	11 7 4	10	16	14	13	15	+400)
	55-64	35 14 21	32	21	49 20 20	111	34	34 21 13	45 19 26	16	
	45-54	25 14 11	34	31	32 13 19	27	29	30	38 17 21	25 17 8	
	35-44	606	24 15 9	19	24 8 16	23	33	35 16 19	31	22 7 15	
Age	25-34	14	12 6	18 01	10	21 8 13	19	40 23 17	34 20 14	19	
Years of	20-24	48-	o ro 4	11 0	∞ w rv	10	238	21 6 15	19	mom	
	15-19	15	21 8 13	22 10 12	29 21 21	T 0 0	32	37 13 24	37 18 19	12 5 7	
	10-14	128	122	26 14 12	91 8 11	0°C 4	40 18 18	53 26 27	45 18 27	26 13 13	
	5-9	10 7	98 11	28	27 17 10	22 11	40 21 19	50 21 29	39 25 14	20 9 11	
	0-4	12 4 8	rc 0 0	29	20	133	26 18 8	59 25 34	35	23 16 7	
	Total	191 99 92	231	267 138 129	264 130 134	218 121 97	305 153 152	401 184 217	367 189 178	210 102 108	
		FΣL	ĿΣĽ	÷ΣĽ	ĻΣĽ	FΣL	ĿΣĽ	⊢ΣĿ	ŀΣ'n	⊢ΣĽ	
		49 Maymont	50 Mervin	51 Meota	52 Shell Lake	53 Rabbit Lake	54 Marcelin	55 Debden	56 Leoville	57 Borden	

See footnotes at end of table

POPULATION BY SPECIFIED AGE GROUPS AND SEX FOR INCORPORATED COMMUNITIES AND RURAL MUNICIPALITIES IN THE STUDY AREA, 1966 (continued) TABLE 1.6

310         34         39         32         24         12         26         38         20         22         17         26           153         11         18         12         12         12         12         12         12         12         14         12         14         12         14         12         14         16         12         14         16         12         13         13         17         15         12         12         14         16         14         16         15         13         17         16         16         14         16         14         16         14         16         14         16         14         16         17         19         18         16         17         19         18         16         17         18         16         16         17         19         18         16         16         17         18         18         18         14         16         16         16         18         16         18         18         18         18         18         18         18         18         18         18         18         18         18         18         18	Total 0-	Total	0-4	5-9	10-14	15-19	Years of 20-24	. Age 25-34	35-44	45-54	55-64	69-69	70 and over
38         40         64         36         25         48         46         47         63         32           18         20         22         19         16         22         25         20         32         13           38         22         22         25         15         3         36         29         32         19         13         13           38         25         22         15         16         26         30         35         41         19         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         12		310 153 157	34 23 11	39 18 21	32 14 18		12 7	26 12 14	38 22 16	20 8 12	22 9 13	17 7 10	46 21 25
32         45         39         26         7         36         39         29         32         19           13         22         15         15         15         15         15         13         11           28         25         28         44         25         11         16         15         17         19           15         16         17         25         11         16         15         15         17         12           14         21         13         22         43         22         28         43         12         15           120         107         109         91         24         77         22         28         43         31         31           120         107         108         91         28         47         50         45         36         36         43         31           120         107         108         91         28         47         50         43         31         11           120         107         108         46         28         47         45         43         43         11           2		489 239 250	38 18 20	40 20 20	54 22 32	36	25 10 15	48 22 26	46 25 21	47 20 27	63 32 31	32	60 32 28
38         25         28         44         25         30         35         41         32         17           15         15         17         25         11         16         15         26         15         15         5           43         38         53         34         22         43         65         67         67         69         53           14         21         34         13         17         22         28         34         22         34         22         34         22         28         34         22         34         22         34         31         32         34         32         34         31         32         32         34         32         32         34         32         34         31         32         32         32         34         31         32         34         31         34         31         34         31         34         31         34         34         31         34         34         34         34         34         34         34         34         34         34         34         34         34         34         34         34		342 177 165	32 19	45 22 23	39 22 17	26 15 11	7 8 4	36 14 22	39 21 18	624	сг — —	119	38 22 16
43         38         53         35         29         43         65         67         69         53           29         17         22         32         22         32         34         22           18         17         19         22         32         32         34         22           18         50         17         19         54         77         95         79         75         24           58         46         28         41         50         36         41         13           54         36         28         41         50         36         41         13           55         20         17         23         16         23         15         22         43         11           25         20         17         23         16         23         15         22         23         15           26         21         22         24         18         30         20         1           26         28         41         46         25         21         24         29         15           28         29         25		349 182 167	38 23 15	25 10 15	28	44 25 19	25 11 14	30 16 14	35 15 20	41 26 15	32 15 17	17	34 19 15
120         107         109         91         54         77         95         79         75         24           58         46         28         41         50         36         41         13           54         50         51         45         26         36         45         45         11           54         36         28         47         33         52         43         11           25         17         23         16         23         16         22         24         18         30         20         1           48         49         41         46         20         41         46         55         60         20         1           22         21         25         21         9         25         21         24         29         15           26         28         11         16         25         11         16         25         31         31         31           41         31         34         36         24         36         21         25         15           42         39         21         24         34		587 284 303	43 14 29	38 21 17	53 34 19	35 13 22	29 17 12	43 22 21	93 33 33	67 28 39	69 34 35	53 22 31	92 47 45
54         36         28         42         38         47         33         52         43         16           25         20         17         23         16         23         15         22         23         15           48         49         41         46         20         41         46         55         60         29           22         21         25         21         9         25         21         24         29         15           26         28         16         25         11         16         25         31         31         14           83         70         55         56         56         24         34         30         21         25         15           41         31         34         36         24         34         30         21         25         15           42         39         21         22         31         24         36         61         61         61         61		898 461 437	120 58 62	107 50 57	109 58 51	91 46 45	54 28 26	77 41 36	95 50 45	79 36 43	75 41 34	24 13 11	67 40 27
48         49         41         46         20         41         46         55         60         29           22         21         25         21         9         25         21         24         29         15           26         28         16         25         11         16         25         15           83         70         55         56         56         54         34         30         21         25         15           41         31         34         36         24         34         30         21         25         15           42         39         21         25         35         66         67         66         66         67         66         66         66         67         67         67         67         67         67         67         66         67         67         66         67         67         66         67         67         67         66         67         67         67         67         67         67         67         67         67         67         67         67         67         67         67         67         67		429 220 209	54 25 29	36 20 16	28	42 23 19	38 16 22	47 23 24	33	52 22 30	43 23 20	150	40 21 19
83 70 55 56 52 69 61 45 61 21 41 31 34 36 24 34 30 21 25 15 42 39 21 20 28 35 31 24 36 6		497 246 251	48 22 26	49 21 28	41 25 16	46 21 25	20	41 25 16	46 21 25	55 24 31	60 29 31	29 15 14	62 34 28
		622 316 306	83 41 42	70 31 39	34 21	20 30.	52 24 28	69 34 35	30	45 21 24	61 25 36	21 15 6	49 25 24

POPULATION BY SPECIFIED AGE GROUPS AND SEX FOR INCORPORATED COMMUNITIES AND RURAL MUNICIPALITIES IN THE STUDY AREA, 1966 (continued) TABLE 1.6

								Years o	of Age					Due 07
			Total	0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	69-59	over
19	7 Shellbrook	FΣU	1,088 546 542	109 60 49	105 59 46	124 61 63	89 46 43	52 27 25	94 41 53	97 45 52	131 63 68	106 52 54	48 20 28	133 72 61
68	3 Meadow Lake	FΣL	3,375	431 225 206	423 212 211	371 196 175	319	212 95 117	330 173 157	311	324 149 175	262 139 123	107 58 49	285 158 127
69	North Battleford	ĻΣĿ	12,262 6,015 6,247	1,464 729 735	1,357 685 672	1,192 634 558	1,122 522 600	939 423 516	1,469 731 738	1,317	1,240 572 668	979 464 515	337 169 168	846 449 397
Rura.	Rural Municipalities <sup>a</sup> 405. Great Bend	a F. E. T.	909 495 414	103 62 41	108 54 54	121 64 57	90 35	43 24 19	77 38 39	98 46 52	118 64 54	92 57 35	18	41 20 21
406.	Mayfield	⊢Σu	763 410 353	79 46 33	92 51 41	88 46	85 47 38	20 9 11	82 38	86 42 44	104 56 48	83 49 34	13	29
434.	Blaine Lake	⊢Σ'n	873 478 395	76 40 36	82 50 32	122 71 51	92 44 44	26 11 15	70 36 34	120 61 59	146 77 69	103 64 39	V 4 K	29 16 13
435.	Redberry	ĿĔĿ	1,184 629 555	92 46 46	116 57 59	125 61 64	117 57 60	35 21 14	96 50 46	166 83 83	193 112 81	154 89 65	46 32 14	44 21 23
436.	Douglas	ĿĔĿ	1,023	110 49 61	117 63 54	110 53 57	82 52 30	35 18 17	92 42 50	144 79 65	148 89 59	102 59 43	23	60 37 23
437.	437. North Battleford	ĿΣĽ	1,001 523 478	109 61 48	122 57 65	137 65 72	98 48 50	46 24 22	102 50 52	103 49 54	113 59 54	99 59 40	31 22 9	41 29 12
See	footnotes at end of		table										00)	(continued)

See footnotes at end of table

POPULATION BY SPECIFIED AGE GROUPS AND SEX FOR INCORPORATED COMMUNITIES AND RURAL MUNICIPALITIES IN THE STUDY AREA, 1966 (continued) TABLE 1.6

							Years 0	of Age					
		Total	0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	62-69	70 and over
464. Leask	FΣL	1,489 810 679	163 84 79	182 102 80	178 85 93	158 88 70	72 38 34	162 88 74	173 92 81	176	123 74 49	43 28 15	59 31 28
466. Meeting Lake	H.Σ.T.	1,081 577 504	111 60 51	126 62 64	129 63 66	111 52 59	51 27 24	107 60 47	151 83 68	108 63 45	116 69 47	23 14 9	48 24 24
467. Round Hill	ĻΣť	756 429 327	69 40 29	80 43 37	91 44 47	60 36 24	37 23 14	6.3 31 32	97 53 44	115 64 51	886 28	21	37 28 9
468. Meota <sup><i>b</i></sup>	-Σ.	1,181 624 557	145 73 72	149 88 61	161 74 87	132 62 70	48 32 16	93	133 61 72	130 73 57	106	30 20 10	54 30 24
469. Turtle River	-Σ".	671 352 319	96 42 54	88 46 42	93 52 41	62 33	24 13 11	2338	72 33 39	71 41 30	38 23	17 10 7	29 15 14
493. Shellbrook	ĻΣĿ	2,100 1,103 997	213 100 113	242 122 120	276 145 131	215 108 107	89 49 40	177 88 89	220 105 115	267 144 123	235 145 90	61 35 26	105 62 43
494. Canwood	⊢ΣĽ	3,072	361 192 169	406 202 204	434 225 209	328 175 153	129 73 56	230 105 125	357 187 170	344 195 149	240 153 87	90 36	153 93 60
496. Spiritwood	÷ Σ ιι	2,399	313 160 153	331 166 165	297 147 150	212 120 92	89 44	268 149 119	279 159 120	237	219 127 92	61 43	30
497. Medstead	⊢ΣĽ	1,089 590 499	139 69 70	128 72 56	140 71 69	108	54 33	104 56 48	126 69 57	100 49	109 66 43	33	48 28 20
See footnotes at end	of	table										(cor	(continued)

POPULATION BY SPECIFIED AGE GROUPS AND SEX FOR INCORPORATED COMMUNITIES AND RURAL MUNICIPALITIES IN THE STUDY AREA, 1966 (concluded) TABLE 1.6

70 and	69-59		118 37 70 70 26 46 48 11 24	37 26 11 30 18 12	37 11 12 13 10	37 26 30 30 10 3 9 9	37 26 30 11 12 13 13 10 10 10 10 10 10 10 10 10 10 10 10 10	37 76 26 46 11 24 30 8E 18 56 10 3 10 2 2 3 11 3 31 12 35 11 53 11 53 11 53 11 53 11 53 11 53 11 53 11 53
55-64 65-69					8	827 77	W =	88 51 37 76 45 35 23 12 7 7 7 4,474 3 2,458 2,016
55-64 65- 118 70 48	118 70 48		88 51 37		76 45 31	76 45 31 35 12	76 31 35 12 7 7	76 45 31 35 23 12 7 7 7 4,474 3 2,458 2,016
127 64 63 138 72 66	127 64 63 138 72 66	138 72 66		88 354 354		33	33 19 13 7	
1	F -	_			43 21 1 22		15 6 9	
35-4		E E			30 21	13		5 2 2
20-24 55 31 24 38 23 15	24 24 23 38 15	38 23 15		41 19 22	30 15	16	က	33 37 7 90 90 90 90 90 90 90 90 90 90 90 90 90
15-19 109 53 56 119	109 53 56 119	119	58	96 56 40	37 16 21	12	7	7 4,567 2,297 2,270
10-14	148 77 71		150 77 73	104 60 44	51 25 26	29	18	18 5,494 2,852 2,642
5-9		127 64 63	118 65 53	113 69 44	76 41 35	42	<u> </u>	5,535 2,854 2,681
0-4		105 53 52	103 59 44	124 62 62	90	29	_	5,441 2,793 2,648
L + 4	10ta1	1,128 618 510	1,111 603 508	867 490 377	457 251 206	190	98	86 48,136 24,922 23,214
		ĿΣĽ	FEL	⊢Σ'n	ب ج ب	⊢Σ		. FEL
		498. Parkdale	499. Mervin	974. L.I.D.	980. L.I.D.	986. L.I.D.		Study Area Total

T. - Total M. - Male F. - Female

 $^{a}$ Rural municipality data include farm and unincorporated community population but exclude populations of incorporated communities.  $^{b}$ Includes Metinota Summer Village.

Source: Census of Canada, 1966, Statistics Canada, Ottawa.

TABLE 1.7 PROPORTION OF POPULATION FALLING WITHIN THREE SPECIFIED AGE GROUPS, 1966

	Pre-School And School Age Groups (O to 19 years)	Working Age Group (20 to 64)	Retired Age Group (65 and over)
	(0 00 13 ) (01 3)	- percent -	(00 and over)
Incorporated Communities	A.F. C	·	3.0.4
32 Denholm	45.6	38.0	16.4
33 Ruddell	33.3	38.5	28.2
36 Fielding 41 Parkside	40.4 26.6	38.5	21.1
42 Makwa	44.2	35.9 35.9	37.5
44 Vawn	44.2	47.4	19.9 6.6
45 Krydor	15.3	48.4	36.3
46 Medstead	41.9	45.8	12.3
47 Speers	35.6	50.9	13.5
49 Maymont	28.8	50.8	20.4
50 Mervin	33.3	48.1	18.6
51 Meota	39.3	40.8	19.9
52 Shell Lake	36.0	46.6	17.4
53 Rabbit Lake	31.7	46.8	21.5
54 Marcelin	45.2	43.6	11.2
55 Debden	49.6	39.9	10.5
56 Leoville	42.5	45.5	12.0
57 Borden	38.6	40.5	20.9
58 Edam	41.6	38.1	20.3
59 Radisson	34.3	46.8	18.9
60 Canwood	41.5	41.8	16.7
61 Glaslyn	38.7	46.7	14.6
62 Hafford	28.8	46.5	24.7
63 Big River	47.6	42.3	10.1
64 Turtleford	37.3	49.7	13.0
65 Leask	37.0	44.7	18.3
66 Spiritwood	42.4	46.3 44.1	11.3
67 Shellbrook 68 Meadow Lake	39.3 45.8	42.6	16.6 11.6
69 North Battleford	41.9	48.5	9.6
os north bactrerord	71.3	40.0	J. 0
ural Municipalities	46.4	47.7	6.5
405. Great Bend	46.4	47.1	6.5
406. Mayfield	44.6	49.1	6.3
134. Blaine Lake	42.6	53.3	4.1
135. Redberry	38.0 41.0	54.4 50.9	7.6 8.1
136. Douglas 137. North Battleford	46.6	46.3	7.1
164. Leask	45.7	47.4	6.9
466. Meeting Lake	44.1	49.3	6.6
467. Round_Hill	39.7	52.6	7.7
468. Meota <sup>a</sup>	49.7	43.2	7.1
469. Turtle River	50.5	42.6	6.9
493. Shellbrook	45.0	47.0	8.0
194. Canwood	49.8	42.3	7.9
196. Spiritwood	48.1	45.5	6.4
197. Medstead	47.3	45.3	7.4
198. Parkdale	43.4	47.2	9.4
199. Mervin	44.1	45.5	10.4
974. L.I.D.	50.4	43.8	5.8
980. L.I.D.	55.6	41.1	3.3
986. L.I.D.	62.6	33.7	3.7
tudy Area Total	43.7	46.3	10.0
askatchewan Total	42.8	47.9	9.3

<sup>&</sup>lt;sup>a</sup>Includes Metinota Summer Village.

Source: Calculated from Table 1.6.

## School Enrolment

The school enrolment figures in Table 1.8 indicate that the trend towards school consolidation in Western Canada has affected the Shellbrook-Turtleford study area. There were no schools in communities "too small to classify". In the hamlets, only Glenbush, Richard and Mont Nebo had any elementary grades. The villages of Whitkow, Mullingar, Holbein and Krydor did not have schools. Grades 1 to 6 or higher were offered in all the other villages, Parkside excepted. There the only grades given were 1 to 4. Complete elementary and secondary grades were available in towns and greater towns other than Edam where only grades 1 to 9 were provided. Of course, all grades were taught in both the public and separate school systems of North Battleford.

TABLE 1.8 SCHOOL ENROLMENT IN THE STUDY AREA BY GRADES, SCHOOL YEAR 1971-72

Aux. Total to (Grades)	1 1	St. Walburg (7-12) Debden (1-12) Shellbrook (1-12) Blaine Lake (1-12) Leask (1-12) Hafford (1-12) North Battleford (1-12) Medstead (1-12) Battleford (1-9)	North Battleford (10-12) Maymont (1-12) North Battleford (1-12) Leoville (1-12)	North Battleford (1-12) Mayfair (1-12) North Battleford (1-12) Redwing (1-8) Poince albort foun (9-1;	Edm (1-9) Vawn (10-12) Speers (1-8) Lafford (0-12)		North Battleford (10-12) Battleford (1-9)	North Dattielora (10-12) Maymont (1-12) Mayfair (1-12) 81 Medstead (9-12) Maymont (1-12)	64 Shellbrook (7-12)
1 12									
10 1									
6									
8	ent -							16	
7	enrolment							12	
9	1							12	10
2								7	13
4							n	14	∞
23							m	10	6
2							4	9	17
-							2	7	4
Grades:	No School No School No School No School No School	NO SCHOOL NO SCHOOL	No School No School	No School No School No School No School	No School No School	No School	No School	No School	ואס סכווסס
Delivery Point	Too Small to Classify 1 Hartwell 2 Cameo 3 Bournemouth 4 Dulwich 5 Cleeves	6 Ormeaux 7 Ordale 8 Tallman 9 Kilwinning 10 Redberry 11 Scentgrass 12 Polwarth 13 Cater 14 Brada	15 Lilac 16 Iffley 17 Ranger	Hamlets 18 Hatherleigh 19 Redfield 20 Hamlin 21 Crutwell	22 Cavalier 23 Keatley	24 Bapaume 25 Robinhood 26 Fairholme 27 Sandwith 28 Mildred 29 Belbute 30 Prince	31 Richard 32 Denholm	33 Ruddell 34 Alticane 35 Glenbush	37 Mont Nebo

TABLE 1.8 SCHOOL ENROLMENT IN THE STUDY AREA BY GRADES, SCHOOL YEAR 1971-72 (concluded)

rupils conveyed to (Grades)	Mayfair (1-12) Mayfair (1-12) Shellbrook (1-12) Shellbrook (5-12) Turtleford (9-12) Edam (7-9) Blaine Lake (1-12) North Battleford (10-12)	Turtleford (9-12) North Battleford (9-12)	Vawn (10-12)		
Total	27 164 84 218 275 38	255 253 69 66 283 142 276	457 433 168 220 189 464 291 293 514 473	219 386 669 1,638	1,705
Aux.		torn Q	26 18 17 16	9	102 219
12	10 28 16	20 20 10 11 11 118	35 18 21 17 19 19 15	26 39 84	126
=	22 25 25	24 19 12 20	26 21 22 23 35 35 36	31 58 116	127
10	13 88 13	19 25 10 10	27 22 22 18 16 30 16 23 28 28 27	31 50 117	161
6	11 59	26 20 19 20 20	3356 3356 3356 3356 3356 3356	18 29 77 150	138
80	ent -	22 21 27 27 30	33 31 31 22 22 26 43 47	21 33 67 122	140
7	enrolment 13 1 12 1 25 2 3	25 17 22 88 29	41 7 7 7 7 7 7 115 130 332 45 45	20 25 62 137	127 200
9	2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	20 20 10 30 33 33	345 345 345 345 345 345 345 345 345 345	31 36 65 136	111
2	16 25 25 6	23 8 10 14 23	448 27 32 32 32 32	23 27 59 137	149
4	16 18 24 7	26 10 12 22 22 22	37 443 443 38 38	33 31 171	130
m	12 13 15 7	19 21 8 8 15 15	31 37 38 38 38 40	27 25 50 137	132 186
2	3 17 10 18 24	17 19 19 19 12 12 21 21	35 112 125 14 155 155 156 157 157 157 157 157 157 157 157 157 157	30 55 41 169	<b>147</b> 186
-	20 20 15 8	13 28 11 10 26 25	02 44 10 10 10 10 10 10 10 10 10 10 10 10 10	16 37 54 162	115
Grades:	No School No School No School				
Delivery Point	villages 38 Whitkow 39 Mullingar 40 Holbein 41 Parkside 42 Makwa 43 Livelong 44 Vawn 45 Krydor 46 Medstead 47 Speers	48 Mayfair 49 Maymont 50 Mervin 51 Meota 52 Shell Lake 53 Rabbit Lake 54 Marcelin	Trowns 55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 60 Canwood 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford 65 Leask	Greater Towns 66 Spiritwood - Separate - Public 67 Shellbrook 68 Meadow Lake	Cities 69 North Battleford - Separate - Public

Aux. - Auxiliary

Source: Saskatchewan Department of Education, Regina.

## Post Office Revenue

Post office revenue is a crude indicator of socio-economic activity in a community and its environs (Table 1.9). Three of the 17 communities "too small to classify" never had post offices and the post offices in the other 14 have been discontinued. The last of these closed at Iffley in 1970. There has never been a post office in the hamlet of Hamlin. Group postal boxes for the deposit of mail addressed to local residents have been placed in 5 communities "too small to classify", 8 hamlets and 1 village.

In 1971, postal revenues for villages ranged from \$114 at Whitkow to \$6,083 at Shell Lake, while towns ranged from \$4,909 at Borden to \$12,687 at Big River. In greater towns, the range was from \$15,349 at Spiritwood to \$47,060 at Meadow Lake. Postal revenue at North Battleford was \$210,141 in 1971.

Postal receipts in all villages except Whitkow, all towns, greater towns and the city of North Battleford have risen over time. The largest percentage gain occurred at Leoville where the increase was about 138 percent between 1963 and 1971. Other communities to double their postal revenues were Ruddell, Mont Nebo, Holbein, Mayfair, Shell Lake and Spiritwood.

TABLE 1.9 POST OFFICE REVENUE IN THE STUDY AREA, FISCAL YEARS 1962-63 TO 1970-71

											ſ	1970		q	1970~			1970 <sup>a</sup>	1970 <sup>a</sup>				٢	1970°	1970	19694	19694	,	1970ª	1970 <sup>a</sup>						
						1969ª			h 1970			April			July			July	July					July	April	Nov.	Aug.		July	July						
						Viul basal	968		ed March			Closed			Closed	684		Closed	Closed					Closed	Closed	Closed	Closed		Closed	Closed						
1971						gould	Se		Close		896	25			63	Oct.		44	89		94			159				1,051	171	107	1,220	1,142	1,367	934	1,225	
1970					9	50	Closed		251		March ]	263	TO TO		163	Closed		126	171		115	9		627	362	222	139	732	641	479	166	725	1,005	620	931	
1969					June 1966	289	95		204		Closed	255	-	Feb. 196/	125	52		119	131			June 196		535	381	376	482	613	539	206	1,001	640	760	632	687	
1968					Closed	291	217		231		166	310		Closed	167	140		132	132		120	Closed		492	377	450	440	909	549	407	920	620	746	564	715	
1967	rs -				37	797	225		176		135	273	e e	153	173	143		96	147		146		ec. 1965	521	421	376	444	597	587	554	686	653	735	551	759	
1966	- dolla				255	293	234	Dec. 1963	172		130	279	L	305	182	146		112	158		147											709				
1965					215	283	269	sed			162	203	F	341	167	217		66	106		158	268	378	577	402	460	359	169	578	675	,316	673	703	570	788	
1964		Office of	28	62	267	959 296	257	155	210	ffice	145	156	ם כפ	329	<u></u>	187		110	115	fice	123	272	414	555	353	472	383	711	612	577	,224	626	673	562	773	
1963		ost		ed 1	-	ped	247			ost (		-	د	767.	150	232		118		Post	125															
Year Ending March 31											*		`	7		7				_		7	(+)	4)	(4)	4	4	7	77	LC	1,3	9	9	9	8	
Delivery Point		Small to Classify Hartwell				Ordale						Cater				Kanger	Hamlets	Hatherleigh	Redfield	Hamlin	Crutwell	Cavalier	Keatley	Bapaume	Robinhood	Fairholme	Sandwith	Mildred	Belbutte	Prince	Richard	Denholm	Ruddell	Alticane	Glenbush	
Del		TOO	J (T)	4	(C)	9 1	00	6	2	_	12			0 1	9 !	_	Ham	$\infty$	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	

(continued)

TABLE 1.9 POST OFFICE REVENUE IN THE STUDY AREA, FISCAL YEARS 1962-63 TO 1970-71 (continued)

Delivery Point	Year Ending March 31	1963	1964	1965	1966	1967	1968	1969	1970	1971	
					op -	dollars -					
36 Fielding 37 Mont Nebo		759	737	711	780	680	645 826	640 834	670 951	752	
Villages 38 Whitkow 39 Mullingar 40 Holbein 41 Parkside 42 Makwa 43 Livelong 44 Vawn 45 Krydor 46 Medstead 47 Speers 48 Mayfair 49 Maymont 51 Meota 52 Shell Lake 53 Rabbit Lake		341 613 1,533 1,532 1,521 1,521 1,969 1,982 2,624 1,982 2,624	356 903 1,518 1,619 1,298 3,034 2,1393 2,195 2,654 2,654 2,057	320 850 676 1,757 1,571 1,695 1,368 2,281 2,716 2,716 2,716 2,799 1,995 3,466	394 1,702 1,702 1,648 1,732 1,732 2,045 2,045 2,581 2,581 2,188 2,188 2,188	377 867 1,751 1,683 1,684 1,299 2,876 2,951 2,951 2,147 3,181 3,181	355 355 1,795 1,795 1,795 1,795 1,795 1,795 1,707 2,707 2,707 2,707 2,707 3,652 3,652 3,785	324 677 709 1,968 1,621 1,679 1,412 2,710 2,710 2,710 2,701 3,526 3,526 3,136 3,1033	1,037 2,147 2,147 1,776 2,031 1,569 1,420 2,977 2,889 2,796 4,018 3,745 3,745	1,868 1,759 1,868 1,868 1,307 1,868 1,250 1,250 1,282 1,282 1,632 1,282 1,282 1,282 1,632 1,632 1,782 1,782 1,782 1,632	Closed July 1970 <sup>a</sup>
Towns 55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 60 Canwood 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford		4,165 2,736 3,122 2,736 3,766 4,073 4,949 4,949	4,517 2,849 3,378 3,378 3,378 4,110 4,308 6,836 6,237	4,975 3,123 3,180 4,004 4,507 7,953 6,714	4,706 3,042 3,042 3,044 4,530 4,538 4,538 6,384 7,919 7,351	4,719 3,354 3,354 3,354 4,690 4,690 6,389 7,764 5,632	4,810 3,715 3,715 3,503 4,052 5,325 6,932 6,580 7,567	4,584 4,033 3,600 3,562 4,217 5,386 6,706 6,463	5,431 4,514 3,826 3,826 3,73 6,338 5,71 7,014 7,079	7,439 6,500 4,909 5,019 6,127 7,872 9,609 11,622 9,315	
Greater Towns 66 Spiritwood		6,952	7,242	8,688	8,925	9,056	9,468	10,920	11,456	15,349	
See footnotes at	end of table								(continued	(peni	

TABLE 1.9 POST OFFICE REVENUE IN THE STUDY AREA, FISCAL YEARS 1962-63 TO 1970-71 (concluded)

67 Shellbrook	13,649	13,453	1965	1966 - de - de - 14,764	6 1967 dollars -	1968	1969	1970	23,912
68 Meadow Lake lities 69 North Battleford	138,268	142,737			154,751	154,751 164,051 169,439	169,439	193,960	(0

<sup>a</sup>Served by group postal boxes.

Source: Canada Post Office Department, Saskatoon.

## Property Tax Assessment

Table 1.10 presents details of tax assessment for each of the 69 grain delivery points in the Shellbrook-Turtleford study area. The purpose of this table is to show the relative importance of railway and railway associated properties to the tax base of communities. In conveying this relationship, the total assessment of railway right-of-way properties, including trackage, warehouses, bulk fuel tanks, grain elevators, etc., as a percent of the total tax assessment of the community, is used.

Generally speaking, the smaller a community is, the higher the proportion of its tax base that is related to right-of-way properties. For example, 100 percent of the tax base in Redberry is made up of railway property while North Battleford derives only 2.4 percent of its taxes from right-of-way properties. This relationship, of course, reflects the greater diversification of economic activities in a larger center.

The usual reason for the tax assessment of right-of-way properties being a small proportion of total assessment in some of the smaller centers is that the grain elevators have closed and been removed, while other non-right-of-way buildings remain. Two examples of this are Kilwinning and Belbutte.

For each community classification group (figures not shown in Table 1.10), railway and railway associated assessments amount to the following percentages of the tax base: "too small to classify", 75 percent; hamlets, 63 percent; villages, 27 percent; towns, 14 percent; greater towns, 11 percent; and 2 percent for the city of North Battleford.

TABLE 1.10 PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972

		000	Cmall to Claccifu		
	1 Hartwell		urn	4 Dulwich	5 Cleeves
			- dollars -		
Right-of-Way Properties					
Railway Property Roadway Other Land Buildings Business	580 * 1	350 *	370	* 0 1 1	* 0 1 1
Other Property Taxable Land Taxable Buildings Taxable Business	1 1 1	1 1 1	40,170	1 1 1	1 1 1
Total Assessment of R.O.W. Properties	280	320	4,580	290	310
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	1 1 1	1 1 1	80 1 1	1 1 1	380
Total Assessment of Non-Right-of-Way Properties	1	ı	80	I	2,060
Total Tax Assessment	280	320	4,660	290	2,370
Percent of Tax Assessment derived from R.O.W. Properties	100.0	100.0	98.3	100.0	13.1
See footnotes at end of table				(continued)	nued)

TABLE 1.10 PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (continued)

		Too S	Small to Class	Classify (cont'd)	
	6 Ormeaux	7 Ordale	8 Tallman	9 Kilwinning	10 Redberry
			- dollars -		
Right-of-Way Properties					
Railway Property Roadway Other Land Buildings Business	* 420 180 100	370	* 0 1 1 8	240	* 370
Other Property Taxable Land Taxable Buildings Taxable Business	. 1 1 1	0911	120 25,120 3,690	1 1 1	- 40 8,910
Total Assessment of R.O.W. Properties	700	430	29,250	240	9,320
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	190	180	200	400 5,120 1,650	1 1 1
Total Assessment of Non-Right-of-Way Properties	1,680	11,170	4,850	7,170	i
Total Tax Assessment	2,380	11,600	34,100	7,410	9,320
Percent of Tax Assessment derived from R.O.W.	29.4	3.7	89.°8	3.2	100.0
See footnotes at end of table				(continued	(pen

TABLE 1.10 PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (continued)

		12. OOT	Small to Classifu	fu (cont'd)	
	11 Scentgrass	1 1	3 Ca		15 Lilac
			- dollars -		
Right-of-Way Properties					
Railway Property Roadway Other Land Buildings Business	* 0 I I	* 0 1 1	* 470 180 100	* 0 1 1	* 170
Other Property Taxable Land Taxable Buildings Taxable Business	90 14,870 3,160	50 11,010 2,010	70,400	110,390 3,580	40 7,920 1,600
Total Assessment of R.O.W. Properties	18,500	13,480	8,220	14,470	9,730
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	0 1 1	100 1,260 600	310 4,390 1,280	1,550	850
Total Assessment of Non-Right-of-Way Properties	06	1,960	5,980	1,600	910
Total Tax Assessment	18,590	15,440	14,200	16,070	10,640
Percent of Tax Assessment derived from R.O.W. Properties	99.5	87.3	57.9	0.06	91.4
See footnotes at end of table	o o			(cont	(continued)

See footnotes at end of table

TABLE 1.10 PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (continued)

	Too Small t	to Classify (cont'd)	t'd) 18 Hatherleigh	Hamlets 19 Redfield	20 Hamlin
ロッペルナーのチーバン・・ ひゃんゃん・・			- dollars -		
riyiir-oi-way riopeities					
Railway Property Roadway Other Land Buildings Business	* 014	680 190 100	* 450 1,800 100	* 420 280 100	390 230 100
Other Property Taxable Land Taxable Buildings Taxable Business	80 16,050 3,620	7,670	40 7,080	120 8,290 2,050	130 39,270 4,310
Total Assessment of R.O.W. Properties	20,160	8,710	9,470	11,260	44,430
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	2,420	550 5,710 650	130 1,900 870	530	150 16,870
Total Assessment of Non-Right-of-Way Properties	2,420	6,910	2,900	4,020	17,020
Total Tax Assessment	22,580	15,620	12,370	15,280	61,450
Percent of Tax Assessment derived from R.O.W.	89.3	55.8	76.6	73.7	72.3
See footnotes at end of table	U U			(continued	(pen

TABLE 1.10 PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (continued)

			Hamlets (cont'd)	2/ Ranalimo	25 Robinhood
	ZI Crutwell	Ca va -	שמש		
			- dollars -		
Right-of-Way Properties					
Railway Property Roadway Other Land Buildings Business	** 430 240	* 0 1 1	* \$ 240   100	390 290 100	4 8 8 × 1 · 1
Other Property Taxable Land Taxable Buildings Taxable Business	70 10,190 3,600	120 22,800 3,930	280 29,620 5,430	16,170	50 9,140 1,520
Total Assessment of R.O.W. Properties	14,530	27,190	36,210	20,470	11,190
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	200 4,940 720	720 5,010 1,130	3,110	1,140 5,790 990	930 5,750 1,340
Total Assessment of Non-Right-of-Way Properties	5,860	6,860	3,580	7,920	8,020
Total Tax Assessment	20,390	34,050	39,790	28,390	19,210
Percent of Tax Assessment derived from R.O.W.	71.3	79.9	91.0	72.1	58.3
See footnotes at end of table	0)			(cont	(continued)

TABLE 1.10 PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (continued)

	26 Fairholme	27 Candwith	Hamlets (cont'd,	20 Rolhu++o	30 Drings
	- 1			1	}
Right-of-Way Properties			dollars -		
Railway Property Roadway Other Land Buildings Business	450 1	* 340 340 100	* 490 280 100	380 700 100	* 400 
Other Property Taxable Land Taxable Buildings Taxable Business	120 14,070 3,280	60 9,640 2,010	80 11,260 2,260	1 1 1	160 28,230 3,940
Total Assessment of R.O.W. Properties	17,920	12,490	14,470	1,180	32,730
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	1,750 15,970 960	530 4,310	2,190 16,780 2,780	1,600 16,230 2,440	3,360 24,140 420
Total Assessment of Non-Right-of-Way Properties	18,680	4,840	21,750	20,270	27,920
Total Tax Assessment	36,600	17,330	36,220	21,450	09,650
Percent of Tax Assessment derived from R.O.W.	49.0	72.1	40.0		54.0
See footnotes at end of table	9			(continued)	(pen

PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (continued) TABLE 1.10

	31 Richard	32 Denholm	Villages 33 Ruddell	34 Alticane	35 Glenbush
			- dollars -		
Right-of-Way Properties					
Railway Property Roadway Other Land Buildings Business	1,950 630 1,550	1,710 470 1,710	1,680 610 1,430	460 360 100	\$20 320 100
Other Property Taxable Land Taxable Buildings Taxable Business	39,500 7,460	90	160 19,390 4,150	130 9,300 1,600	150 20,040 3,600
Total Assessment of R.O.W. Properties	51,520	10,030	27,520	11,950	24,730
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	3,130 22,720 1,420	2,780 65,130 810	4,110 29,770 3,040	3,100 16,605 930	2,070 17,880 830
Total Assessment of Non-Right-of-Way Properties	27,270	68,720	36,920	20,635	20,780
Total Tax Assessment	78,790	78,750	64,440	32,585	45,510
Percent of Tax Assessment derived from R.O.W.	65.4	12.7	42.7	36.7	54.3
See footnotes at end of table	o o			(cont	(continued)

TABLE 1.10 PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (continued)

	36 Fielding	37 Mont Nebo	Villages (cont'd, 38 Whitkow 39	39 Mullingar	40 Holbein
	5		1 7		- 1
Right-of-Way Properties			3		
Railway Property Roadway Other Land Buildings Business	2,550 680	* 480 820 100	260 *	* 430 230 100	* 760 240 100
Other Property Taxable Land Taxable Buildings Taxable Business	180 17,390 4,080	190 22,340 3,140	190 12,440 3,450	160 17,540 3,380	350 55,740 9,620
Total Assessment of R.O.W. Properties	24,880	27,070	16,640	21,840	66,810
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	4,210 17,420 930	2,530 40,130 6,910	1,770 15,450 3,750	2,010 17,830 4,120	2,200 23,200 1,470
Total Assessment of Non-Right-of-Way Properties	22,560	49,570	20,970	23,960	26,870
Total Tax Assessment	47,440	76,640	37,610	45,800	93,680
Percent of Tax Assessment Derived from R.O.W. Properties	52.4	. 35.3	44.2	47.7	71.3
See footnotes at end of table				(continued)	(pen

PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (continued) TABLE 1.10

			Villages (cont'd		1 1
	41 Parkside	42 Makwa	43 Livelong	44 Vawn	45 Krydor
			- dollars -		
Right-of-Way Properties					
Railway Property Roadway Other Land Buildings Business	1,770 660 1,780 220	1 1 1 1	, 480 1,310 100	1,380 680 1,840 290	1,410 730 1,530 620
Other Property Taxable Land Taxable Buildings Taxable Business	35,630 8,660	1 1 1	160 16,700 3,260	310 27,460 4,410	1,140 43,280 7,890
Total Assessment of R.O.W. Properties	49,040	1	22,010	36,370	56,600
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	9,830 68,350 2,610	8,030 67,110 16,700	5,960 57,650 13,400	6,930 77,640 7,430	18,310 105,596 10,780
Total Assessment of Non-Right-of-Way Properties	80,790	91,840	010,77	92,000	134,686
Total Tax Assessment	129,880	91,840	99,020	128,370	191,286
Percent of Tax Assessment Derived from R.O.W. Properties	37.8	0.0	22.2	28.	.3 29.6
See footnotes at end of table				uoo)	(continued)

TABLE 1.10 PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (continued)

	46 Medstead	47 Speers	Villages (cont'd)	t'd) 49 Maymont	50 Mervin
			- dollars -		
Right-of-Way Properties					
Railway Property Roadway Other Land Buildings Business	1,870 870 5,030 830	1,530 1,190 4,970 700	3,870 640	1,560 1,070 2,810 1,010	1,830 830 1,700 850
Other Property Taxable Land Taxable Buildings Taxable Business	590 31,240 10,660	930 51,280 13,450	320 21,840 4,780	880 34,700 7,010	680 28,310 7,140
Total Assessment of R.O.W. Properties	51,090	74,050	32,010	49,040	41,340
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	17,560 113,880 11,890	15,120 110,060 18,900	6,810 59,680 9,930	17,700 106,960 12,600	18,890 137,490 17,140
Total Assessment of Non-Right-of-Way Properties	143,330	144,080	76,420	137,260	173,550
Total Tax Assessment	194,420	218,130	108,430	186,300	214,860
Percent of Tax Assessment Derived from R.O.W. Properties	26.3	33.9	29.5	26.3	19.2
See footnotes at end of table	O)			(cont	(continued)

PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (continued) TABLE 1.10

		Villages	(cont'd)		
	51 Meota	52 Shell Lake	53 Rabbit Lake	54 Marcelin	55 Debden
			- dollars -		
Right-of-Way Properties					
Railway Property Roadway Other Land Buildings Business	2,400 1,900 2,400 670	1,470 1,080 4,610	2,580 810 2,470 710	1,590 1,600 4,760 750	2,370 1,370 3,140 610
Other Property Taxable Land Taxable Buildings Taxable Business	1,400 1,860 12,300	800 27,530 7,950	40,380 8,800	1,360 73,790 9,920	1,080 60,920 17,070
Total Assessment of R.O.W. Properties	22,930	44,120	56,300	93,770	86,560
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	40,980 243,010 23,280	24,960 164,420 27,830	14,265 138,478 16,150	29,370 199,960 31,730	30,370 255,570 51,780
Total Assessment of Non-Right-of-Way Properties	307,270	217,210	168,893	261,060	337,720
Total Tax Assessment	330,200	261,330	225,193	354,830	424,280
Percent of Tax Assessment Derived from R.O.W. Properties	6.9	16.9	25.0	26.4	20.4
See footnotes at end of table	0			(cont	(continued)

TABLE 1.10 PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (continued)

	56 10001110	TC Rondon	Towns (cont'd)	50 Radisson	60 Canwood
	200				
Right-of-Way Properties			S I P I O D		
Railway Property Roadway Other Land Buildings Business	1,860 2,150 3,220 1,110	1,620 1,420 3,070 1,480	1,680 1,590 3,210 580	4,050 2,090 3,100 1,740	3,660 2,120 4,210 720
Other Property Taxable Land Taxable Buildings Taxable Business	2,280 32,090 9,490	2,310 70,240 12,290	1,320 48,910 15,480	1,150 23,810 10,180	1,940 86,570 22,590
Total Assessment of R.O.W. Properties	52,200	92,430	72,770	46,120	121,810
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	45,570 247,010 35,200	30,280 156,570 28,840	42,160 264,340 27,990	79,590 448,530 57,920	53,280 278,190 58,540
Total Assessment of Non-Right-of-Way Properties	327,780	215,690	334,490	586,040	390,010
Total Tax Assessment	379,980	308,120	407,260	632,160	511,820
Percent of Tax Assessment derived from R.O.W.	13.7	30.0	17.9	7.3	2.4
See footnotes at end of table				(continued)	nued)

TABLE 1.10 PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (continued)

	61 Glaslyn	62 Hafford	Towns (cont'd) 63 Big River	64 Turtleford	65 Leask
			- dollars -		
Right-of-Way Properties					
Railway Property Roadway Other Land Buildings Business	2,520 1,160 2,580 660	1,890 3,210 4,460 1,180	4,950 1,600 4,790 1,420	1,860 1,920 6,540	1,740 2,760 2,660 810
Other Property Taxable Land Taxable Buildings Taxable Business	2,440 39,260 12,620	2,970 67,120 22,890	130	1,790 55,000 15,710	2,530 105,740 21,990
Total Assessment of R.O.W. Properties	61,240	103,720	12,890	83,740	138,230
Non-Right-of-Way Properties					
Taxable Land Taxable Buildings Taxable Business	28,960 276,180 75,705	147,830 550,440 84,370	108,200 532,810 99,360	77,960 374,850 68,070	81,750 411,750 61,540
Total Assessment of Non-Right-of-Way Properties	380,845	782,640	740,370	520,880	554,440
Total Tax Assessment	442,085	886,360	753,260	604,620	692,670
Percent of Tax Assessment derived from R.O.W. Properties	13.9	7.11	7.1	13.9	20.0

TABLE 1.10 PROPERTY TAX ASSESSMENT FOR COMMUNITIES IN THE STUDY AREA, 1972 (concluded)

	66 Spiritwood	Greater Towns 67 Shellbrook	68 Meadow Lake <sup>a</sup>	69 North Battleford <sup>a</sup>
Right-of-Way Properties		lob -	dollars -	
Railway Property Roadway Other Land Buildings Business	6,050 5,640 3,070	6,250 9,510 6,230 1,690	6,900 58,020 5,520 2,030	46,920 90,460 79,450 17,110
Other Property Taxable Land Taxable Buildings Taxable Business	6,180 82,890 14,170	1,940 134,000 37,390	70,380 270,920 101,280	92,510 107,900 91,420
Total Assessment of R.O.W. Properties	118,770	197,010	515,050	525,770
Non-Right-of-Way Properties Taxable Land Taxable Buildings Taxable Business	159,060 612,840 160,670	276,940 938,600 158,810	1,227,550 2,373,360 576,230	6,056,050 12,744,950 2,258,520
Total Assessment of Non-Right-of-Way Properties	932,570	1,374,350	4,177,140	21,059,520
Total Tax Assessment	1,051,340	1,571,360	4,692,190	21,585,290
Percent of Tax Assessment derived from R.O.W.	11.3	12.5	11.0	2.4

R.O.W. - Right-of-Way.

\*Tax assessment of rail roadway property in unincorporated communities is included as part of total rural municipality tax assessments.

<sup>a</sup>1971 Annual Assessment Return used.

Source: Saskatchewan Department of Municipal Affairs, Regina.

## Carload Rail Traffic

The volume of rail traffic to and from a community is another indicator of economic activity. For a more complete picture, truck traffic should also be considered. In general, the more people and service activities there are in a community, the more freight traffic is generated. Grain shipments at a particular delivery point depend on such interrelated factors as size of hinterland, number of permit holders, crop yields, and domestic and export marketings.

Table 1.11 shows the number of carloads shipped in and out of each delivery point in the study area from 1966 to 1971.  $^{\it L}$  The traffic is broken down into five broad categories.

At delivery points that were "too small to classify", railway traffic was light. It was mostly outbound grain and tended to diminish over time.

Hamlets had a greater volume of outbound grain shipments. In 1971, the largest number of carloads, 341, moved from Denholm. There was very little inbound traffic. In most instances, it amounted to only 1 or 2 carloads in a year.

Grain shipments also accounted for most of the outbound rail traffic for villages. With 563 carloads, Holbein had the most outbound traffic in 1971. The few inbound shipments were mostly manufactures and miscellaneous products.

The traffic pattern for towns and greater towns is essentially the same as it is for hamlets and villages; that is, outbound grain is the most important commodity, outbound traffic greatly exceeds inbound traffic, and inbound traffic is made up of a variety of products such as coal, lumber and building supplies, fertilizer, fuel oil, agricultural supplies and machinery. Of course, the traffic volume is greater than it is in smaller centers. In 1971, total carload movements in towns and greater towns ranged from 389 cars at Edam to 1,238 cars at Meadow Lake. The city of North Battleford had more carloads inbound, 1,118, than outbound, 1,059.

<sup>&</sup>lt;sup>1</sup>Carload rail traffic data prior to 1966 were not available.

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971

\$ 5000		1966	5	1967	1968	8	1969	1	1970	0	197	-
	117	3 000		3		3 000	-	300		3 300	117	000
mod Gwell to Olegaitin						- carloads	ads -					
1 Hartwell												
Products of Agriculture	ı	ı	1	1	1	ı	ı	1	ŧ	1	1	,
Animals and Products	ı	i	1	1	ı	i	1	1	ı	ł	ı	1
Products of Mines	ı	ı	ı	1	1	ŧ	1	ı	1	1	ı	1
Products of Forests	,	1	ı	1	ı	1	1	1	ı	3	1	ı
Manufactures and Misc.	ı	ı	1	1	1	ı	1	ı	1	ı	ı	1
Total	ı	ı	ı	1	ı	,	ı	ŧ	ı	î	3	1
i c												
2 Cameo		,		c								
Products of Agriculture	1	_	ŧ	$\infty$	1	ı	1	ı	i	1	ı	ı
Animals and Products	1	1	ı	i	ı	1	ı	ı	1	ı	L	1
Products of Mines	1	ı	ŧ	ı	1	1	1	1	1	i	-	ı
Products of Forests	1	ı	ſ	ı	1	ı	1	ı	1	1	ı	E E
Manufactures and Misc.	t	1 (	í	1	1	1	ł		ı	į	î	ı
Total	ŧ	_	1	$\infty$	1	i	3	T	ı	ì	,—	ī
3 Bournemouth												
Products of Agriculture	ī	35	ı	29	1	18	1	31	,	22	1	9
Animals and Products	ł	ı	1	ı	ı	1	1	1	ı	1	1	ı
Products of Mines	î	1	ı	í	1	ı	1	1	ł	í	1	ı
Products of Forests	ŧ	I	ı	ı		1	£	ı	1	ı	ı	ı
Manutactures and M1sc. Total	1	٦ ٢	1 1	20	1 1	1 🛱	ı	1 [		22	ı	ıç
	ŧ	?		]	ŧ	2	ī	-	ı	1	,	,
4 Dulwich										,		,
Products of Agriculture	ı	25	ı	9	1	1	t	ı	1		į	_
Animals and Products	í	ı	ı	ı	1	ı	ı	1	1	1	ı	1
Products of Mines	1	ı	1	ı	ı	1	1	ı	t	1	1	į
Products of Forests	1	ı	ı	ı	ı	1	1	ł	ı	1	ı	ı
Manufactures and Misc.	1	I C	ı	1 4	ı	1	I	ı	ı	f	1	1 -
lotai	1	97	1	٥	ŧ	1	ı	ı	1	_	ı	-
5 Cleeves												
Products of Agriculture	1	8	1	56	ı	i	ı	ı	i	1	f	1
Animals and Products	1	1	ı	ı	ł	ł	í	ı	í	1	1	1
Products of Mines	ı	!	ŧ	1	1	I	f	!	1	1	1	ı
Products of Forests	1	1	1	ı	ı	1	1	ı	t	1	ŧ	ı
Manufactures and Misc.	1	1	1	1	ı	ī	ı	1	ı	ı	1	ı
Total	1	8	1	56	,	ı	ı	1	t	1	1	1
See footnotes at end of table										(cont	(continued)	

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

	2301	7301		1968	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1969		19	1970	1971	71
Delivery Point	In Out	In	Out	In	Out	In	Out	In	Out	In	Out
					- carloads	ı spe					
6 Ormeaux Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc. Total	42	11111	23	1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1	errie
7 Ordale Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc. Total	33 1 1 1 1 1 3 2 3 3 3 3 3 3 3 3 3 3 3 3	, , , , , ,	37	1 1 1 1 1	29	1 1 1 1 1	21 2 21	1 1 1 1 1 1	32 33 65	1 1 1 1 1 1	11 12 22
8 Tallman Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc. Total	138	1 1 1 1 9	127	1 1 1 1 1 1	0 0 0 11110	1 1 1 1 1 1	76	1 ( 1 1 1 1	87 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1	16
9 Kilwinning Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc. Total	10		1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1	1 1 1 1 1 1		1 1 1 1 1 1	011110
10 Redberry Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc. Total	n.a.	η.a		n.a	• ®	Ξ	n.a.	2	ت ت		م
See footnotes at end of table										(continued)	(pənu

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

Delivery Point	In	1966 Out	In	1967 Out	In In	1968 Out	In	1969 Out	1970 In	70 Out	197. In	71 0ut
						- carloads	oads -					
11 Scentgrass Products of Agriculture	1	17	1	40	t	36	1	33	1	8	1	109
Animals and Products	Le	t	1 -	1	1	1	1	ı	1	1	ı	ı
Products of Mines Products of Forests	- 2	1 1	- 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	. –	1 (
Manufactures and Misc.	ιm	17	١	40	1 1	1 98	1 1	333	1 1	- [8	1 —	109
12 Polwarth Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	) 1 1 1 1 1	. 8 1 1 1 1 8		2 62	1 1 1 1 1 1	27 27 27 27	1 1 1 1 1 1	<u> </u>	1 1 1 1 1 1	44		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
13 Cater Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	1 1 1 1 1 1	∞ ı ı ı ı ∞	1 1 1 1 1 1	<b>∞</b> ιιιι <b>∞</b>	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	4         4		<b>の</b> 1111の
14 Brada Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	110110	142	· · - · - · - · · · · · · · · · · · · ·	134 - - 134	1 10 1 10	611116	1 1 1 1 1 1	62 1 1 1 6	1 1 1 1 1	8 1 1 1 1 8	1 1 1 1 1 1	148
15 Lilac Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	וומוומ	123	110110	153	1101-6	103		8 1 1 1 1 8 9	1 1 1 1 1 1	105	1 1 1 1 1	157
See footnotes at end of table											(continued)	(pa

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

		1966	1967	1	1968		1969		1970		1	1971
Delivery Point	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
						ı ca	- carloads -					
16 Iffley												
Products of Agriculture	ı	34	ł	39	1	24	ı	<u>∞</u>	ı	32	ŧ	9/
Animals and Products	1	1	1	1	ı	1	ı	E	1	ı	ı	(
Products of Mines	ı	ı	1 1	ı	ı	ı	ı	ı	1	ı	ı	ı
Products of Forests	ı	ı	_	ı	1	1	ı	ı	1	ı	ı	ı
Manutactures and Misc.	1 1	- V2	Le	30	1 [	24	1 1	1 8	1 1	32 1	1 1	76
	ı	t O	-	0		7		2		1		
17 Ranger												
Products of Agriculture	ŧ	38	ı	46	1	32	ı	27	1	_	t	10
Animals and Products	1	ı	1	ı	1	1	ı	ı	1	ı	1	1
Products of Mines	ı	1	ı	Li	ı	1 (	ı	1	I	ı	ı	1 1
Products of Forests	1	1	1	<b>,</b>	ı	2	ŀ	1	ł	i	1 1	3/
Manufactures and Misc.	ı	1	ł		ı	1 1	ı	1 [	ı	Fr	— r	1 [
Total	1	38	I	47	1	37	ı	27	ı		_	4/
Hamlets												
Droducts of Adriculture	ſ	20		27	ı	33	,	22	,	21	1	=
Animals and Products	1	) ) )	ı	j	1	) F	ı	i i	1	. 1	1	1
Products of Mines	ı	ı	1	1	ı		1	ı	1	1	1	ı
Products of Forests	ı	ı	1	1	ı	I		I	1	ı	1	1
Manufactures and Misc.	1	1	1	1	ŧ	1	ı	1	1	1 3	ı	1 ;
Total	ı	20	ı	27	ı	33	1	22	ı	7.7	1	_
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7												
ב עו	ı	49	,	74	1	69	ı	29	1	53	ı	19
Animals and Products	1	<u>)</u> 1	ı	1	1	1	ı	ŧ	1	1	,	1
Products of Mines	2	1	ı	1	ı	1	1	ı	1	1	1	ı
Products of Forests	1	1	i	ı	_	1	1	1	,	ı	1	ı
Manufactures and Misc.	2	ı	1	ı	_	1	ı	1	,	ı	ı	1
Total	4	49	ı	74	2	69		29	ı	23	ı	19
20 Hamilin Desducts of Agriculture	ı	157	ı	143	1	121	ı	43	1	_	1	p
Animals and Products	1	. 1	ı	1	,	1	ı	1	,	1	1	ı
Products of Mines	1	ι	,	,	2	t	2	1	<b></b>	1	. 2	1
Products of Forests	2	ı	_	ı	1	1	1	1	ı	1	1	ı
Manufactures and Misc.	ı m	1	m	1	m	1	2	1		1	1	1
Total	2	157	4	143	2	121	4	43	_	_	2	p
See footnotes at end of table											(continued)	(pa

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

		1966	1967	67	1968	800	1969	65	1970	70	1971	
Delivery Point	In	0nt	In	0nt	In	0nt	In	0nt	In	Out	In	Out
						t Ca	- carloads -					
21 Crutwell Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	1 1 1 1 1 1	£ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1	27	1 1 1 1 1 1	111166	1 1 1 1 1 1		1 1 1 1 1 1	0	1 1 1 1 1	4 4
22 Cavalier Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	111100	151	1 + 1 1 m m	162		125	1 1 1 1 1 1		1 1 1 1 1 1	771	1 1 1 1 1	227
23 Keatley Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	נוטוואנט	771	112189	115 - - - - -	11-128	107	110110	16	110110	186	1 1 - 1 - 0	183
24 Bapaume Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	1 1 1 1 1		1 1 1 1 1 1	8 1 1 1 1 0		8	1 1 1 1 1 1	74	1 1 1 1 1	174	1 1 1 1 1	158
25 Robinhood Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	1 1 1 1 1 1	8''''	1 1 1 1 1 1	© 1 1 1.1 9 8	1 1 1 1 1 1	65	1 1 1 1 1 1	63 83 83	1 1 1 1 1 1	105	1 1 1 1 1 1	E 1 1 1 E
See footnotes at end of table											(continued)	(pa

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

		1066	10	1967	3.0	1968	01	1969	1970	70	197	
Delivery Point	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
						- Cal	carloads -					
26 Fairholme	1	C	ı	67	ı	20	I	40	ı	84	ı	76
Animals and Products	: 1	) I	ı	, m	1	)	8	<u></u>	ı	- I	ı	. 1
Products of Mines	1	1	1	1	1	ı	1	ı	1	ī	ı	ž
Products of Forests	1	ı	1	1	Ł	1	ŧ	1	ı	1 1	ı	1
Manufactures and Misc.	been t	I (	ı	1 (	ı	I C	ı	1 0	1	L	ı	7.6
lotal		20	t	0/	1	52	ı	04	ı	00	1	0 /
27 Sandwith												
Products of Agriculture	1	1	1	1	1	2	1	56	ı	74	ı	23
Animals and Products	1	ı	1	ı	1	8	1	r	1	ı	ı	1
Products of Mines	l .	1	ł	ŧ	ı	1	1	1	1	í	ı	1
Products of Forests	ı	1	ı	1	1	ı	1	ı		i	1 -	1
Manufactures and Misc.	ı	1	ı	1	ı	10	ı	- 20	E I	7.7		23.1
lotal	ı	8	ı	E	1	7	ı	07	ı	+	-	3
28 Mildred								;	,	ć		Ĺ
Products of Agriculture	8	09	1	238	ı	45	1	43	_	26	1	54
Animals and Products	ı	1	1	1	ı	ì	E	ı	ı		ı	1 1
Products of Mines	ı	ı	ı	1	I	ı	ţ	ı ı	1 1		, ,	1 1
Products of Forests	1 -	1	10	1 1	۱	1 1	1 —	1 1	1 1	1 1	1 1	t
Manutactures and Misc. Total		- 09	70	1 00		45	(	43	_	92	ı	54
-008	-	8	1	)	-	<u>-</u>						
29 Belbutte								į		T P		c
Products of Agriculture	1	22	ı	20	ı	44	1	24	ı	_	ı	7
Animals and Products	ı	ı	ı	1	ı	1	ı	1	ı	ı	1 -	ı
Products of Mines	ı	ı	1	ı	ı	1	1	ı	ı	ī	-	ł
Products of Forests	t	1	ı	ı	1	ı	1 (	ı	ı	ı	1	ı
Manufactures and Misc.	1	1	ı	1 (	1	1 4	7 0	1 5	1	1 1-		10
Total	8	27	ı	20	ı	44	7	47	1	_	-	J
SO Prince Products of Adriculture	I	191	,	212	1	190	_	140	- 1	245	ı	295
Animals and Products	ı	. 1	,	ı	1	ì	1	1	ı	1	1	1
Products of Mines	1	ı	ı	ı	1	ı	1	1	ı	1	1	1
Products of Forests	1	1	1	1	1	1	1	1	ı	1	1	ı
Manufactures and Misc.	1	ı	2	1	1	ı	1	1	2	1	_	1
Total	ı	191	2 1	212	ì	190	_	140	2	245	-	295
5555												
											(continued)	ed)

(continued)

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TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

	19	1966	1967	57		1968	1969	99	1970	70		1971
Delivery Point	In	0ut	In	Out	In	Out	In	0nt	In	0nt	In	Out
						ı	carloads -					
31 Richard												
Products of Agriculture	1	263	1	287	1	215	1	139	t	244	ı	337
Animals and Products	ı	t	1	ı	1		ı	1	ı	1	1	1
Products of Mines	5	1	4	1	က	1	2	ı	ŧ	1	ı	1
Products of Forests	ı	ı	1	ı	ı	ı	ı	1	ı	ı	t	1
Manufactures and Misc.	2	ı		ı	_		ŧ	1	က	1	2	1
Total	7	263	2	287	4	215	2	139	က	244	2	337
32 Denholm												
Description of Assistant		220		750		710		213		120		LVC
Answers of Agriculture	ı	067	1	504	ſ	417	1	2	ı	107	ı	341
Animals and Products	l c	ı	۱۰	ı	1 0	ı	1 0	ı	1 (	ı	1 (	
Products of Mines	η	í	_	ı	7	ı	7	ı	7	ı	2	ı
Products of Forests	ı	ı	ı	ı	1	ı	ı	ı	f	ı	ı	ı
Manufactures and Misc.	ı	ı	1	ı	1	ı	ı	1	1	1	1	ı
Total	က	230	_	264	2	214	2	113	2	261	2	341
33 0.742011												
Description of Aces of These		00		00		7.7		0		67		301
Animals and Deaducts	ē i	00	1 1	0	1	+		t .	1	/0		071
Description of Minor		l :	1 1	1 1		1 '	ı		1 1	1 :		
Products of Mines		ı	ı	ı	ı	1	ı	ı	1	1	ı	ı
Manufortuna Man	1 0	'	1 -	'	1	t	ł	F	î	ı	ı	ı
Manutactures and Misc.	70	1 C		۱ ۵	1 1	- 77	1 .	1 01	1 1	73	1 1	106
lotal	7	00	-	000		+	ŀ	ļ U		<u>`</u>		170
34 Alticane												
Products of Agriculture	1	79	1	64	1	22	1	37	ı	73	ı	82
Animals and Products	ı	f	ı	1	t	ı	ı	t	1	1	ı	1
Products of Mines	<b>-</b>	ı	1	ı	ı	ı	1	ı	ı	1	1	ı
Products of Forests	1	ı	1	ı	ı	1	ı	ı	ı	ı	1	1
Manufactures and Misc.	2	1 (	r 1	1 ;	ı	1 1	1	1 !	ı	t (	ı	1 6
lotal	n	5/	-	64	ī	2/	ı	3/	ı	/3	1	28
35 Glenbush (C.N.)												
Products of Agriculture	1	103	1	97	1	73	1	32	1	1	1	1
Animals and Products	ı	ı	1	1	1	1	t	1	ı	1	1	ı
Products of Mines	က	1	2	ı	ŀ	ı	ı	1	ı	t	ı	ı
Products of Forests	ŝ	ı	1	ı	ı	ı	ı	ı	ı	1	1	1
Manufactures and Misc.	2	1	<u>-</u>	ŀ	_	1	ı	ı	ı	ı	2	ı
Total	2	103	m	97	_	73	t	32	1	ı	2	1
See footnotes at end of table										٥	(continued	<del>-</del>

See footnotes at end of table

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

				-	,		0001		0701		107	
Delivery Point	In	966 Out	In	Out	In	Out	In	Out	In	Out	In	Out
						- carl	-loads -					
35 Glenbush (C.P.)	ŧ	1	ı		1	ſ	1	31	ı	147	1	114
Animals and Products	1	ı	ı	1	1	ı	1	1	1	1	t	1
Products of Mines	ı	1	-	ı	2	1	2	ı	_	ı	ı	ı
Products of Forests	B 1	1	ı	ı	t	t	ş	1	1	1	ı	ı
Manufactures and Misc. Total	,— ,—	1 1	i	1 (	1 2	1 1	1 2	31	ı —	147	1 1	114
so Fielding Products of Aariculture	ı	152	ı	155	ı	103	1	87	1	129	1	182
Animals and Products	ı	1	ı	1	1	1	1	1	1 (	ı	1 ,	1
Products of Mines	4	ı		ŧ	2	1	2	ı	2	ı	-	1
Products of Forests	1	1	I	ſ	ı	1	ı	ı	4 1	1 (	a 1	; 1
Manutactures and Misc. Total	- 4	152	l p	155	1 8	103	2 ا	- 87	2 1	129	·	182
222	-	1	-		1	)	l					
37 Mont Nebo	ı	C)		8/8	1	63	1	40	ı	105	_	96
Animals and Products	1 1	ו כ	1	r 1		) I	ı	<u> </u>	ı	) I		1
Products of Mines	1	ι	1	1	_	1	1	1	1	1	,	ŧ
Products of Forests	9	ı	က	ŧ	1	က	1	ı	ı	1	ŧ	ı
Manufactures and Misc.	1 (	I L	ıc	1 5	Le	1 0	ı	1 0	ı	1 70 -	١.	- 90
Total	٥	c S	n	84	-	00	ı	<del>4</del> 5	1	co-	-	0
Villages												
38 Whitkow		000		150	ı	01	-	42	1	86	١	130
Products of Agriculture	ı	077		00		ח ו		1 1		) 1	ı	) I
Animals and Products	1 1	1 1	1 1			1 1	1 1			١	1	ı
Products of Forests			ı	ı	ı	1	1	,	,	,	•	•
Manufactures and Misc.	1	ı	p-m	1	1	4	ı	ı	1	ı	•	2
Total	1	228	_	159	1	92	1	42	,	98	1	132
39 Mullingar	ı	ğ	(	106	1	72	ı	57	,	94	. 1	56
Animals and Products		3 1	,		ı	) I	1	1	ı	1	ı	•
Products of Mines	1	1	ı	1	1	ı	1	1	ı	ı	1	ı
Products of Forests	1	i	1	1		1	1	1	ı	ŀ	ı	ı
Manufactures and Misc.	_	1	_	1	_	1	1	1	ı	1	ı	ı
	_	86	-	106	_	22	,	27	ı	94	1	26

(continued)

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

Delivery Point	I In	1966 Out	In In	1967 Out	In	1968 Out	In Is	1969 Out	In	1970 Out	1971 In	71 0ut
						i	carloads .					
40 Holbein Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc. Total		418	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	418	ממוווו	320	111144	306	111144	581	טטוווו	563
41 Parkside Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc. Total	1 1 - 1 2 5	154	111144	168	111100	109	1111	116	1111	177	11-164	172
42 Makwa Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc. Total	0ff-1	Off-line point	ىد									
43 Livelong Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	ווסווס	72 2 - 1 4 7 4	114114	87 2 2 - 1	מוומוו	66 8 1 75	110110	54	114114	124	114114	00111100
44 Vawn Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	ص	م	° ∀ •	و ت	ت ن	n .a.	n. .a	n.a.	م	.a .a	د ت	٠ و
See footnotes at end of table											(continued)	

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

Delivery Point	19 In	1966 Out	1967 In	57 Out	1968 In	58 Out	1969 In	59 Out	1970 In	out Out	197 In	1 Out
						- Ca	carloads -					
45 Krydor Droducte of Amiculture		242	1	207	1	205	ı	172	1	201	1	278
Animals and Products	- 1	1 7 I	1	, I	1	) I	1	1	ı	1	1	ı
Products of Mines	m	1	m	i	1	1	2	1	2	î	<u></u>	ı
Products of Forests	1	ı	ı	ı	1	Li	1 1	ı	ı	ı	1	1
Manufactures and Misc.	1 0	2.4.0	1 00	207	1 1	206	— «	172	10	201	1	278
46 Medstead Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	)	7	ווווו פ		111100		1 1 1 1 1 1	49	1 1 1 1 1 1	167		158
47 Speers Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	1 1 1 9 6 6 1	217	2021 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	227	1 1 1 1 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	145	34	112	222111	242	255	391
48 Mayfair Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	133	1 1 2 8 9 3 2 8 9 3 2 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	139	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	65	HILLEMM	m 1 1 1 1 m	1111	151	lllimm	169 - - - 169
49 Maymont Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	114140	193	1 1 1 1 1 1 1 1 1 1 1	234	110104	187	11-128	99	1 1 1 1 1 1	175	11111	278

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

		1966	1967		1968		1969	69	1970	70		1971
Delivery Point	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
						ı Ca	carloads -					
50 Mervin												
Products of Agriculture	1	162	1	190	1	139	ı	137	ı	207	ł	211
Animals and Products	1	m	1		1	1	1	. 1	ł	1	,	- 1
Products of Mines	11	ı	œ	ı	7	1	7	1	7	8	7	ı
Products of Forests	ı	ı	1	ì	ı	•	1	ı	å	1	1	ı
Manufactures and Misc.	29	1	65	1	45	ı	26	ı	7	ı	4	1
Total	78	165	73	190	52	139	33	137	14	207	Ξ	211
71 Moo+2												
-		101		104		C		C		נטנ		0 7
Animals and Products	1 1	671		40-	1 :	08	ı	70	ı	171	ı	741
Products of Mines	10	1 1			ی ر	r í	ا دد	1 3	1 4	1 1	ı ~	1 1
Products of Forests		1	. 1	ı	ì	1	)	ı	٠ ،	ı	) 1	,
Manufactures and Misc.	67	1	99	1	64	,	75	. 1	72		9	1 1
Total	77	125	73	134	70	91	8	52	9/	121	6	142
27 cd												
Droducts of Adriculture	1	142	t	152	1	121	,	129		216	,	143
Animals and Products	ŧ	1 1	ı	- 1	,	- I	1	] 1	ı			) i
Products of Mines	9	ſ	4	ı	Ŋ	,	r.	t	4	ı	2	1
Products of Forests	1	2	1	ı	1	1		1		1	z	ı
Manufactures and Misc.	42	1 (	32	I (	34	2 5	35	1 (	30	8 5	38	1 0
iotal	84	142	36	152	39	123	40	129	34	216	40	143
53 Rabbit Lake												
Products of Agriculture	I	165	1	247	1	173	ı	179	1	367	1	393
Animals and Products	1 (	1	1 (	1	1 .		1 1	î	1 1	ŧ	8 (	3
Products of Mines	$\infty$	t	<sub>∞</sub>		4	ı	Ω.	ı	വ	ı	က	1
Products of Forests Manufactures and Mic	ΙU	1	1 0	ŧ	ı	ŧ	1 1	ı	1 <	ı	1 (	,
randiactures and mist. Total		165	7 2	247	1 4	173	- 6	179	<del>1</del> 0	367	2 ~	303
-55	2	2	-	ř	<b>-</b>	2	7		)		2	
54 Marcelin												
Products of Agriculture	ı	310	ı	256		250	í	200	1	311	ı	386
Animals and Products	10	ı	1 4		ıc	ı	1 0	1	1	,	ı	ı
Dyodinto of Foronti	0 :		0	1	0	8	7	8	8	ş	ı	1
Making of roll Mich	î Li	B	1 1	İ	I	1 0	1 <	1 -	lu	)	1 <	ŧ
manulactures and misc. Total	. E	310	13	256	၁ တ	252	t 0	201	വ വ	311	t 4	386
See footnotes at end of table										)	(continued)	( p

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

	0.1	930		790		1968	1969	65	1970	0,	197	
Delivery Point	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Towns						- Ca	carloads -					
W.	ı	257	1	289	ı	269	í	207	ı	327	,	363
Animals and Products		1	ı	) )	1	ı I	ı	1	1	1	,	ı
Products of Mines	5	1	2	1	1	ŧ	_	í	က	ı	ł	ī
Products of Forests	ŧ	1	1	t		1	I (	1	1 6	ıc	ı ü	10
Manufactures and Misc. Total	92	257	0 0 0	289	73	269	29 60	207	71	330	52	365
56 Leoville Draducts of Adriculture	1	183	ı	202	1	148	1	92	ı	240	ı	177
Animals and Products	1	1	1	1	1 1	ı	1 (	ı	) L	E	1 <	1
Products of Mines	12	l e	7	ı	_	1 0	∞ -	1 5	ا ک	121	<del>1</del> 1	282
Manufacture and Micc	וע	1	1 99	t t	1 [9	၇	- 65	9	69	2	72	9
Total	77	184	73	202	68	151	94		74	373	9/	465
57 Borden		L		L		270		173	1	297	ı	521
Products of Agriculture	1 1	320	1 1	222 1	1 1	0 1		2 1	1	1	ı	i i
Products of Mines	12	1	=	1	10	1	10	1	_ ;	ı	_	1
Products of Forests	L	ı	,— <b>«</b>	ı	r S	ı	~ ~	1	- 0	1 1	7 6	. 1
Manufactures and Misc. Total	19	356	16	355	20 20	346	16	173	10	297	·	521
58 Edam		376	1	285	ı	210	1	227	1	343	ı	360
Animals and Products	·	) I	ł	1	ŧ	E	1	1	ı	1	1 (	1
Products of Mines	12	ł	9	ı	က	1	2	1	က	1	~	
Products of Forests	1	1	1 (		1 (	1	1 0	1	1 1	8 1	- 27	1 3
Manufactures and Misc.	52	246	09	285	43	210	22	227	54	343	29	360
lotal	0	047	9	207	)  -	7	3	ì				
59 Radisson		0000		320		247	1	186	ı	259	1	360
Animals of Agriculture	1 1	067	i 1	) 1	1	1	٠	1	1	1	ı	1
Products of Mines	23	1	19	1	12	•	15	•	0	t	7	
Products of Forests	က	1	က	•	1 ;	ı	1 6	1 0	1 5	Ьę	1 0	1 -
Manufactures and Misc.	114	1 0	103	- 000	93	- 247	386	7 881	- 8	260	87	361
Total	- 40 - 0	282	671	350	2	7+7	5	-	3			
See footnotes at end of table											(continued)	(pe

See footnotes at end of table

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

Delivery Point	1966 In	36 0ut	19 In	1967 Out	1968 In	58 0ut	1969 In	59 Out	1970 In	70 Out	197 In	71 0ut
						ca -	carloads -					
60 Canwood Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	21 1 1 85	496 1 13 510	- 17 180 80	444	133 13 13 13 13 13 13 13 13 13 13 13 13	390	- 11 56 67	363	- 10 10 59	593 594 594	1 8 : 56	609
61 Glaslyn Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	142	242	112	214	127	170	1000	162	: [[	315		276
62 Hafford Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	- 11 110 126	13 - 1 - EE	- 9 98 111	370	1 1 9 1 7 7 8	303	1 8 1 8 4 4 5 4 5 4 5 4 5 6 6 6 6 6 6 6 6 6 6 6	267	35 - 41	365	1 3 8 6 1	472 472
63 Big River Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc. Total	11 4 139 154	47 - 243 290	17 - 4 - 153	51 - 311 362	9 - 4 - 160	43 - 534 577	11 6 6 167 184	31 223 254	8 1 1 152	52 269 326	14 - 4 1 148 167	59 - 445 7 511
64 Turtleford Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	4 22 129 155	186 58 - - 244	13 101 118	289 81 - - 370	139	195 86 1 282	- 8 - 105	202 84	101	406 77 1 484	6 6 53	373 71 - - 444
See footnotes at end of table											(continued)	(P:

TABLE 1.11 REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (continued)

Delivery Point	In	1966 Out	1967 In	967 Out	1968 In	58 Out	1969 In	59 Out	1970 In	70 Out	1971 In	77 Out
						ı ca	carloads -					
65 Leask Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	15 15 15 15 15 15	469	118128	537	1 1 4 6 70 0	406	337	362	24	90 90 9	1 1 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	019
Greater Towns 66 Spiritwood Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc. Total	10 10 174	334	- - - - - - - - - - - - - - - - - - -	339	1 1 1 2 4 9 8 8	264 12 - 276	1000	257	1 14-886	52 22 22 1 1 1 3	93	360
67 Shellbrook Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	74 107 186	490 - - 3 493	54 115 172	451	- - 40 1 87 128	379	39 8 143	311	300	551	31.18	502
68 Meadow Lake Products of Agriculture Animals and Products Products of Mines Products of Forests Manufactures and Misc.	12 42 10 383 447	1,005 26 111 1,148	10 30 13 308 362	885 25 109 1,023	5 25 10 280 320	681 28 136 847	25 25 327 357	851 9 41 910	23 23 334 371	1,212 12 1 151 151 2 1,378	2 20 10 232 264	818 1 149 6 974

See footnotes at end of table

(continued)

REVENUE CARLOAD RAIL TRAFFIC BY DELIVERY POINT IN THE STUDY AREA, 1966 TO 1971 (concluded) TABLE 1.11

	_	996	1967	7	1968	8	1969		1970	70		1971	
Delivery Point	In	0nt	In	Out	In	0nt	In	Out	In	Out	In	Out	
						- ca	- carloads -						
Cities 69 North Battleford (C.N.)													
Products of Adriculture	92	292	77	309	44	292	44	217	27	431	28	632	
Animals and Products	t	481	2	476	6	372	44	373	26	340	48	237	
Products of Mines	12	ı	10	ı	56	1	18	1	က	1	4	1	
Products of Forests	20	1	22	ı	16	1	37	ı	40	ı	49	ŝ	
Manufactures and Misc.	913	119	831	160	742	150	747	149	733	175	773	186	
Total	1,037	892	942	945	837	814	890	739	859	946	902	1,055	
69 North Battleford (C.P.)													
Products of Agriculture	29	വ	20	20	16	13	00	2	2	1	വ	1	
Animals and Products	t	45	ī	7	1	က	1	1	ı	9	1	2	
Products of Mines	2	2	4	2	2	_	7	_	m	_	4	1	
Products of Forests	49	1	51	ı	47	ı	51	ı	48	1	33	ı	
Manufactures and Misc.	266	_	264	13	222	_	217	2	124	2	108	2	
Total	346	53	339	42	287	8	283	13	177	12	156	4	

Products of Forests - Logs, lumber, all processed natural wood, plywood, shingles, pulpwood, etc. Manufactures and Miscellaneous - Petroleum products, chemicals, fertilizer, machinery and parts, vehicles, Products of Agriculture - All grains, seeds, flour, hay and straw, fruits and vegetables, etc. Products of Mines - Coal, mineral ores and concentrates, cement, brick, asphalt, etc. Animals and Products - All livestock, poultry, meats, fish, dairy products, etc.

furniture, food and feed products, wood pulp, newsprint paper, etc.

n.a. - Not available.

Canadian Pacific Railways, Department of Research, Montreal, Quebec. Canadian National Railways, Freight Sales, Winnipeg, Manitoba. Source:

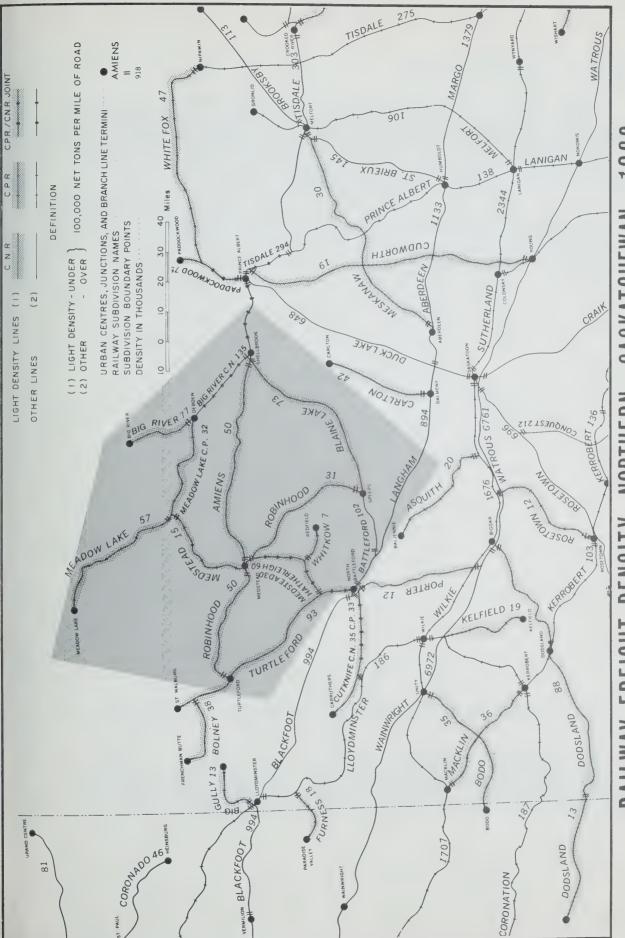
### Railway Freight Density

For purposes of internal management, the railway companies keep detailed records of the tonnage of revenue freight on every mile of track each year. Figure 1.2 shows this information for 1968 on a railway network map of northern Saskatchewan that includes the Shellbrook-Turtleford study area.

The data in Figure 1.2 is expressed in thousands of net tons of freight per mile of line and the map indicates where traffic is heavy and where it is light. Some transport authorities measure the profitability of lines by their traffic density or by the traffic they generate. These measurements, however, do not consider the nature of the traffic or the rates charged. Despite the shortcomings of using such methods, the map in Figure 1.2 is coded to show lower density lines where the freight was less than 100,000 net tons per mile of road and higher density lines where the freight was more than 100,000 net tons per mile of road in 1968.

The traffic density in the study area in 1968 ranged from 7,000 net tons on the Whitkow subdivision to 894,000 net tons on the Langham subdivision. All subdivisions in the region were defined as light density lines except the Langham subdivision, the Battleford subdivision and part of the Big River subdivision.

In general, it may be said that three kinds of rail line operations exist; namely, those that are profitable, those that are unprofitable and those that are not clearly profitable or unprofitable. In the United States, the Federal Railroad Administration is attempting to establish "automatic" minimum, quantifiable standards for determining unprofitability and, therefore, abandonment. One such proposed standard is the 34-car rule which essentially states that a rail line is uneconomic if it carries less than 34 carloads of freight per mile of track each year. This rule, like the measurement of traffic density, does not take into account the nature of the freight carried or the revenue earned.



FREIGHT DENSITY - NORTHERN RAILWAY

Source: Map "Railway Freight Density Prairie Region 1968" Soil Research Institute, Canada Department of Agriculture, Ottawa.

## Highway Transportation Services

Truck traffic data similar to railway carload traffic showing volume of traffic to and from each community was not available. Most communities are, however, served by one or more trucking companies. The names of forhire common and contract carriers serving each center are listed in Table 1.12. Excluded from this list are, of course, farm trucks as well as private urban and private intercity truckers.

Several communities "too small to classify" and hamlets, as well as the village of Livelong, have no trucking service. Twenty-three points are served by only one carrier. North Battleford, being a larger center, is served by 9 for-hire carriers.

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	kay s Trans- port Ltd.	Canadian National Trans- port	Dawson Trans- port Ltd.	Henry's Trans- port	Soo- Security Motor- ways Ltd.	North Central Express- way Ltd.	Central Trans- port	Harvey's Trans- port	Lay's Trans- port	Eppen's Trans- port	McKay's Trans- port	Hub City Express Ltd.	Boyd Bagnall Trans- port	Sask. Transportation Co.
Too Small to Classify 7 Ordale			×											
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#### PART II

#### GRAIN PRODUCTION CHARACTERISTICS

# Physical Features and Soil Capability for Agriculture 1

The study area encompasses about four million acres of farmland within parts of the Saskatchewan Plains and the Alberta High Plains physiographic regions that are also respectively known as the Second Prairie Steppe and the Third Prairie Steppe. The area within the Second Prairie Steppe includes the Beaver River Plains around Meadow Lake and that portion of the Saskatchewan Rivers Plain lying along the North Saskatchewan River. These plains have elevations ranging from 1,500 feet above sea level along the North Saskatchewan River to about 1,750 feet near Debden. The rise from the Second Prairie Steppe to the Third Prairie Steppe is marked by the Missouri Couteau, which consists primarily of the Thickwood Hills but also includes the Whitewood Hills near North Battleford and the Leoville Hills at Leoville. The greatest elevation, 2,450 feet above sea level, occurs in the Thickwood Hills in the vicinity of Rabbit Lake.

While much of the study area is internally drained into shallow lakes and bogs, external drainage is provided by the North Saskatchewan, Beaver, Sturgeon, Shellbrook and Big Rivers and their tributaries.

The region encompasses parts of the Black, Grey and Transition (degraded Black) soil zones that have a capability for agriculture ranging from Class 2 to Class 4. A few small areas, such as the one at Shellbrook, are Class 1; however, the rest of the soils are usually downgraded because of excessive slope, insufficient capacity to hold water or some other topographic limitation.

For a more detailed description of topography and soil capability in the region, see J. Mitchell and others, Saskatchewan Soil Survey Reports No. 12 and No. 13, Saskatoon, University of Saskatchewan, 1944 and 1950; J.H. Richards and K.I. Fung, Atlas of Saskatchewan, Saskatoon, University of Saskatchewan, 1969; and Canada Land Inventory Soil Capability for Agriculture sheet maps for Saskatchewan.

#### Sample Aerial Photos

Figures 2.1, 2.2, 2.3 and 2.4 are aerial photographs of selected localities in the Shellbrook-Turtleford study region that were taken in 1970 by the Prairie Farm Assistance Administration and used by that agency in its association with Operation LIFT. Communities, railroads and highways are identified on the figures, which have been included in the study simply to show the kind of aerial photos that are available for the entire prairie region. Their scale is such that approximately 0.8 of an inch equals 1.0 mile.

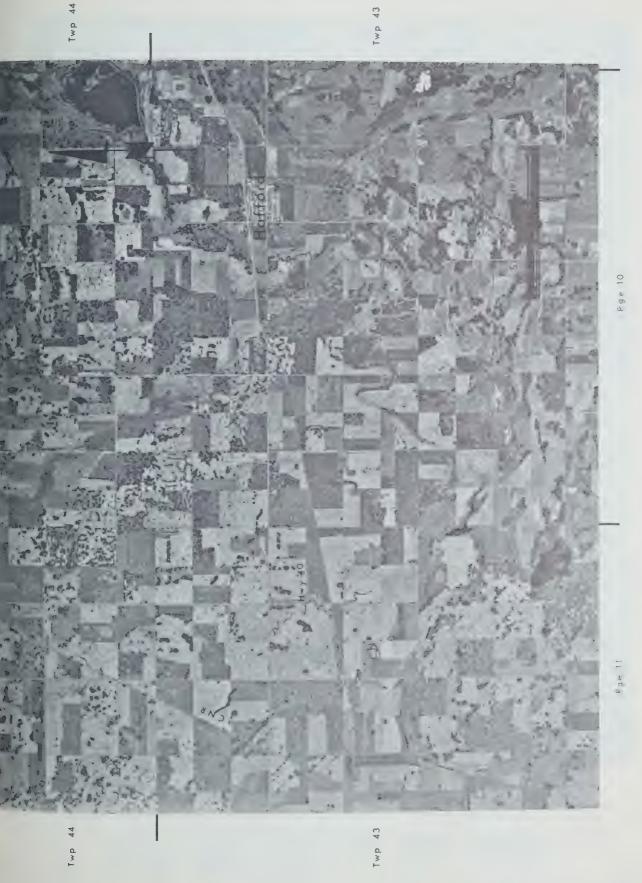
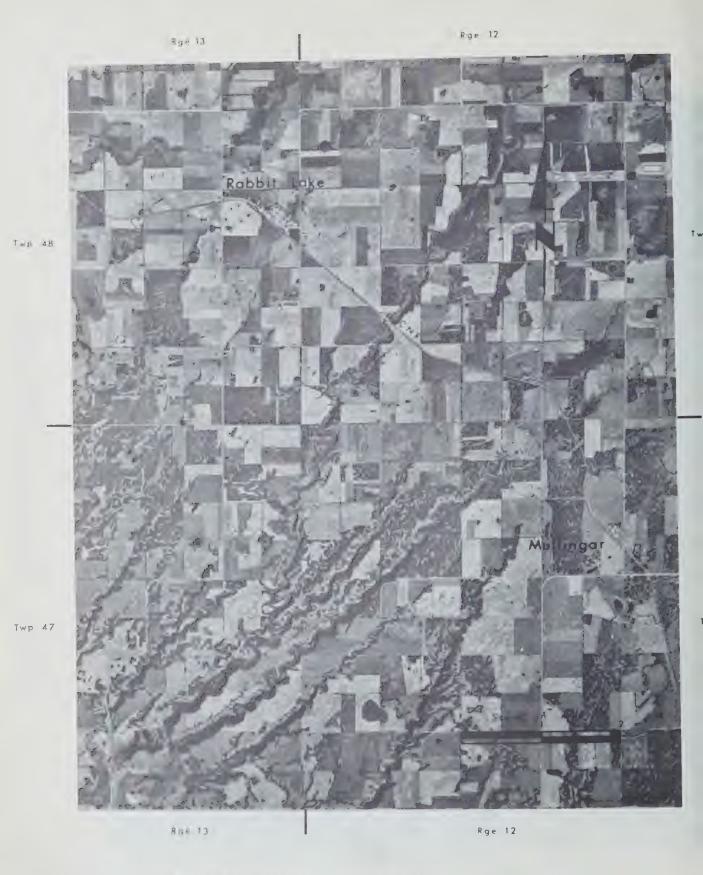


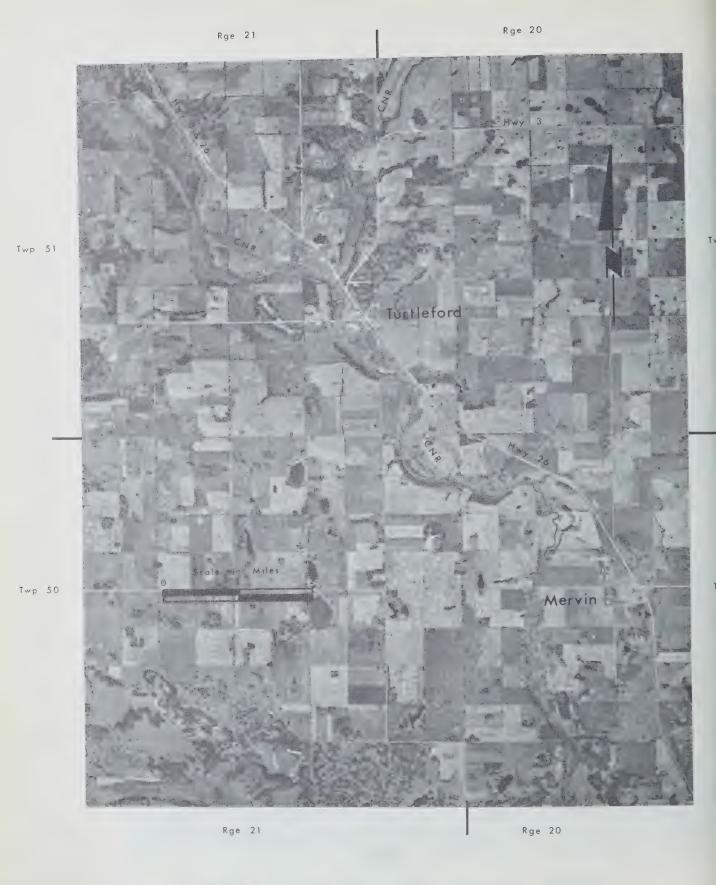
Figure 2.1



AERIAL VIEW OF RABBIT LAKE AREA



Figure 2.3



AERIAL VIEW OF TURTLEFORD AREA

#### Temperature Norms and Extremes

Temperature norms and extremes for four weather reporting stations are shown in Table 2.1. The data gives a good indication of temperatures within the study area.

July mean daily temperatures range from  $61.0^\circ F$  at Rabbit Lake to  $65.7^\circ F$  at North Battleford. The same temperature readings in January range from  $-0.3^\circ F$  at North Battleford to  $-2.7^\circ F$  at Rabbit Lake. North Battleford and Spiritwood recorded the highest temperature of  $103^\circ F$  in the month of July. Rabbit Lake recorded the lowest reading,  $-64^\circ F$ , in January.

In general the climate is continental with wide variations in day and night temperatures and in seasonal temperatures. There are resultant climatic limitations for the growing of crops in some parts of the region. The Saskatchewan Rivers Plain portion of the study region has little or no significant limitation. The annual growing season is 158-168 days of which 90-100 days usually make up the average frost-free period. The accumulative number of degree-days ranges from 2,250 to 2,500. The Thickwood Hills and the Beaver River Plains are characterized by a shorter, cooler growing season with an average of 148-158 days. The average frost-free period is only 70-80 days. The number of degree-days varies from 1,750-2,250 but averages well below 2,000.

## Precipitation

Table 2.2 shows monthly and annual precipitation averages in terms of rainfall, snowfall and total precipitation for the meteorological stations of North Battleford, Rabbit Lake, Spiritwood and Turtleford. Data is also given for Parkside where the experimental farm records precipitation throughout the year. The annual average precipitation ranges from 13.7 inches at North Battleford to 16.3 inches at Rabbit Lake. In the five-month period from May to September, the stations receive from 63 to 70 percent of their annual precipitation. Most of this takes place in July except at Parkside. There the greatest amount falls in June. Approximately 72 percent of annual precipitation is in the form of rain.

 $<sup>^{</sup>I}\mathrm{The}$  amount of effective heat available to plants is sometimes expressed in terms of "growing degree-days" or "degree-days". Degree-days are most commonly calculated from a base temperature of 42°F which is near the threshold of growth for a number of common crops. One growing degree-day results from each degree that the mean temperature for the day is above 42°F. No degree-days are counted when the mean temperature is equal to or below 42°F.

TEMPERATURE NORMS AND EXTREMES FOR SPECIFIED METEOROLOGICAL STATIONS TABLE 2.1

TABLE 2.1 TEMPERATURE NURMS AND EXIREMES FOR	IS AND EATER	EMES FOR ST	בר זו זרע ויור		1								,
Moteorn logical Station	January	February	March	April	May	June	July	August	September	October	November	December	Year
מייייייייייייייייייייייייייייייייייייי					\$	degrees	Fahrenh	e: t					
North Battleford  Mean Daily Maximum <sup>a</sup> Mean Daily Minimum <sup>a</sup> Mean Daily Temperature <sup>a</sup> Maximum Temperature <sup>b</sup> Minimum Temperature <sup>b</sup>	8.6 -9.1 -0.3 52	14.3 -5.2 4.6 53	26.5 7.8 17.2 -42	48.6 27.1 37.9 94 -18	64.6 39.6 52.1 101	70.6 47.2 58.9 101 24	78.3 53.0 65.7 103	75.3 49.7 62.5 100 29	64.3 40.5 52.4 96	51.6 29.6 40.6 87	29.1 13.0 21.1 69 -40	15.5 -1.2 7.2 -46	45.6 24.3 35.0 103 -61
Rabbit Lake Mean Daily Maximum <sup>a</sup> Mean Daily Minimum <sup>a</sup> Mean Daily Temperature <sup>a</sup> Maximum Temperature <sup>a</sup> Minimum Temperature <sup>a</sup>	7.4 -12.7 -2.7 56 -64	14.3 -8.9 2.7 54	25.6 2.2 13.9 58.	45.5 22.3 33.9 89.	62.6 34.9 48.8 97	68.5 41.4 55.0 99	75.4 46.6 61.0 98	73.0 43.5 58.3 97	61.9 34.9 90.8	49.0 25.3 37.2 90	26.6 9.5 18.1 68	13.3 -4.4 4.5 52 -51	43.6 19.6 31.6 99 -64
Spiritwood Mean Daily Maximum <sup>a</sup> Mean Daily Minimum <sup>a</sup> Mean Daily Temperature <sup>a</sup> Maximum Temperature <sup>a</sup> Minimum Temperature <sup>a</sup>	10.3 -13.9 -1.8 52	75. 9.3.9 55.2.3.3	27.5 2.8 15.2 58 -51	47.3 22.9 35.1 91	64.5 35.0 49.8 100	70.2 41.8 56.0 98 23	76.8 47.4 62.2 103 26	74.2 44.4 59.3 18	63.7 36.1 49.9 6	26.5 38.9 89.9	29.3 10.6 20.0 66 -39	17.2 -4.7 6.3 55	45.7 20.0 32.9 103
Turtleford Mean Daily Maximume Mean Daily Minimume Mean Daily Temperature Maximum Temperature Minimum Temperature	10.1 -12.6 -1.3 45	15.5 -7.8 49.	26.9 3.7 115.3 68	47.8 23.9 35.9 89	63.8 36.0 49.9 10	69.6 42.3 56.0 101 22	76.4 47.1 61.8 101 29	72.9 43.9 58.4 96 20	62.8 36.0 49.4 88	50.6 25.4 38.0 86 -8	28.5 9.4 19.0 68. -39	15.7 -5.6 5.1 49 -50	45.1 20.1 32.6 101 -60
		-	-										

<sup>a</sup>Normals were computed directly from a period of record of 25 to 30 years within the period 1931-1960. In most cases the record existed over

the full 30 years.  $^{\rm L}$ Extremes are for 60-69 years.  $^{\rm C}$ Extremes are for 30-39 years.  $^{\rm E}$ Extremes are for 40-49 years.  $^{\rm S}$ Same as Footnote a but less confidence was placed in the data.

Temperature and Precipitation Tables for Prairie Provinces, Vol. 111, Canada Department of Transport, Meteorological Branch, Toronto, Source:

Ontario, 1967.

MONTHLY AND ANNUAL AVERAGE PRECIPITATION FOR SPECIFIED METEOROLOGICAL STATIONS TABLE 2.2

Meteorological Station	January	January February	March	April	May	June	July	August	September	October	November	December	Year
							inches	1					
North Battleford Mean Rainfall <sup>a</sup> Mean Snowfall <sup>a</sup> Mean Total Precipitation <sup>b</sup>	0.03	0.01 5.2 0.53	0.02 5.6 0.58	0.47 3.6 0.83	1.28	2.20	2.24	1.71	1.11	0.63 3.0 0.93	0.12 6.2 0.74	0.01 8.1 0.82	9.83 38.8 13.71
Parkside Mean Rainfall <sup>C</sup> Mean Snowfall <sup>C</sup> Mean Total Precipitation <sup>b</sup>	0.00 4.8 0.48	0.00 3.3 0.33	0.02 7.9 0.81	0.44 3.9 0.83	1.55	3.03 0.0 3.03	2.20	1.91 0.0 1.91	1.68	0.39 4.1 0.80	0.12 5.4 0.66	0.00	11.34 37.6 15.10
Rabbit Lake Mean Rainfall <sup>d</sup> Mean Snowfall <sup>d</sup> Mean Total Precipitation <sup>b</sup>	0.00 7.8 0.78	0.00 5.5 0.55	0.03 7.1 0.74	0.42 5.6 0.98	1.31	2.72 0.0	2.77	2.19	1.47	0.58 3.4 0.92	0.07 7.3 0.80	0.04 8.2 0.86	11.60 46.9 16.29
Spiritwood Mean Rainfall $^d$ Mean Snowfall $^d$ Mean Total Precipitation $^b$	0.00 5.7 0.57	0.00 4.3 0.43	0.02 7.0 0.72	0.31 5.5 0.86	1.11	2.22	2.31 0.0 2.31	2.10	1.23	0.41	0.10 6.3 0.73	0.01 8.3 0.84	9.82 41.4 13.96
Turtleford Mean Rainfall <sup>d</sup> Mean Snowfall <sup>d</sup> Mean Total Precipitation <sup>b</sup>	0.00	0.00	0.03 8.1 0.84	0.46 4.7 0.93	1.26	2.25	2.72	2.50	1.08	0.59 3.4 0.93	0.03	0.00	10.92 48.9 15.81

No adjustment factor has  $^{\rm a}$  Norms are based on the full 30-year period from 1931-1960.  $^{\rm b}$  Total precipitation measured in inches of rain. Ten inches of snow equal one inch of rain.  $^{\rm c}$  These averages are based on the period of record of 10-24 years during the period 1931-1960.

been used. Anorms were computed directly from a period of record of 25 to 30 years within the period 1931-1960. In most cases the record existed over the full 30 years.

Temperature and Precipitation Tables for Prairie Provinces, Vol. 111, Canada Department of Transport, Meteorological Branch, Toronto, Ontario, 1967. Source:

#### Hail Insurance

Table 2.3 contains information obtained from the Saskatchewan Municipal Hail Association regarding number of claims filed, acres insured and acres on which damage was claimed by municipalities in the Shellbrook-Turtleford region. Over the ten-year period from 1962 to 1971, an average of 118,373 acres was insured each year. Claims for crop damage on insured acres ranged from 0.5 percent in the municipality of Meeting Lake to 17.4 percent in the municipality of Round Hill. For the study area, claims for crop damage in the same period averaged 9,560 acres or 8.1 percent of insured acres, and the percentage of insured acres for which damage was claimed each year ranged from a low of 0.7 percent to a high of 18.0 percent. On the average, each of the municipalities of Blaine Lake, Meeting Lake, Round Hill, Shellbrook, Medstead and Parkdale had less than one claim a year.

(continued)

SASKATCHEWAN MUNICIPAL HAIL INSURANCE: NUMBER OF CLAIMS FILED, ACRES INSURED AND ACRES ON WHICH DAMAGE CLAIMED IN THE STUDY AREA, 1962 TO 1971 TABLE 2.3

1962
20,399 21, 0 8,
16,507 18, 293 3, 1.8 1
0 0 0 0
1,306 2,10
2,983 9,92 0 88 0 88
1 7 858 27,403 268 1,093 1.0 4.0
0 410 2,017 0 409 0 20.3

SASKATCHEWAN MUNICIPAL HAIL INSURANCE: NUMBER OF CLAIMS FILED, ACRES INSURED AND ACRES ON WHICH DAMAGE CLAIMED IN THE STUDY AREA, 1962 TO 1971 (continued) TABLE 2.3

Rural Municipality	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	Avg./Yr.
466. Meeting Lake No. of Claims Filed Acres Insured Acres on Which Damage Claimed Percent	226 0	0000	0000	0000	0000	635	2,129	1,724	1,890 35	1,025	0.1 763 4 0.5
467. Round Hill No. of Claims Filed Acres Insured Acres on Which Damage Claimed Percent	0000	0000	0000	0000	0000	0000	979	504	2 564 223 39.5	1 453 211 46.6	0.3 250 43 17.4
468. Meota No. of Claims Filed Acres Insured Acres on Which Damage Claimed Percent	3,345	2,170	2,384 200 8.4	3,164 1,232 38.9	2,254 959 42.5	2,949 233 7.9	3,284	3,885	2,720	3,122 0 0	2,928 262 9.0
469. Turtle River No. of Claims Filed Acres Insured Acres on Which Damage Claimed Percent	8,054	22 10,913 2,364 21.7	12,143 1,735 14.3	12,493 2,735 21.9	13,372 3,118 23.3	13,340 0 0	0 12,671 0	6 12,905 396 3.1	10,020 140 1.4	12,563 813 6.5	7.3 11,847 1,130
493. Shellbrook No. of Claims Filed Acres Insured Acres on Which Damage Claimed Percent	0000	0000	0 4 0 0 0 0	120	107	1 594 80 13.5	0	708	624 0	863	0.1 381 2.1
494. Canwood No. of Claims Filed Acres Insured Acres on Which Damage Claimed Percent	1,684	2,055	705	2,033 1,121 55.1	4,630 0	4,115	4,120 70 1.7	7,018	5,109	7,485 885 11.8	3,895 208 5.3
496. Spiritwood No. of Claims Filed Acres Insured Acres on Which Damage Claimed Percent	233 0 0	124	214	2 79 79 100.0	0 6 0 0	2,168	5,919	5,917 1,639 27.7	4,764 0 0	6,318 941 14.9	2,583 266 10.3
										,	

SASKATCHEWAN MUNICIPAL HAIL INSURANCE: NUMBER OF CLAIMS FILED, ACRES INSURED AND ACRES ON WHICH DAMAGE CLAIMED IN THE STUDY AREA, 1962 TO 1971 (concluded) TABLE 2.3

Avg./Yr.	0.7 797,1 70 3.9	1,302 120 9.2	4,578 443 9.7	57 118,373 9,560 8.1
1971	3,345 470 14.1	7,237 714 9.9	12,110 2,290 18.9	62 152,644 12,886 8.4
1970	2,276	3 4,542 380 8.4	7,872 663 8.4	23 3,283 3.0
1969	2,599 228 8.8	526 102 19.4	6,262	24 139,198 2,525 1.8
1968	3,091	305	5,586 620 11.1	138,165 1,795 1.3
1967	2,155	0000	4,230	87 123,952 14,608 11.8
1966	2,063	0000	3,608 1.2	111 124,181 19,387 15.6
1965	1,721	0000	2,269 139 6.1	93 17,943 17,943
1964	0000	0000	1,417	31 102,692 4,850 4.7
1963	0 480 0	0000	3 1,424 542 38.1	123 98,909 17,765 18.0
1962	244 0 0	413 0	1,006	2 84,985 561 0.7
Rural Municipality	497. Medstead No. of Claims Filed Acres Insured Acres on Which Damage Claimed Percent	498. Parkdale No. of Claims Filed Acres Insured Acres on Which Damage Claimed Percent	499. Mervin No. of Claims Filed Acres Insured Acres on Which Damage Claimed Percent	TOTAL STUDY AREA No. of Claims Filed Acres Insured Acres on Which Damage Claimed Percent

Saskatchewan Municipal Hail Insurance Association, Regina, Saskatchewan. Source:

#### Sales of Farmland

An overview of farmland transactions in the study area is provided by the data in Table 2.4. In the nine-year period from 1963 to 1971, 1,033 transactions were recorded, averaging 300 acres each. These are representative sales in the sense that the tabulations did not include family or other deals involving concessions or premiums; e.g., farmland that is near a town and that may have been purchased for non-agricultural use. The average price of an acre of land rose from \$20.68 in 1963 to \$60.64 in 1968, almost tripling in value. The high price of \$158.23 for an acre in 1968 afterwards fell to \$125.00 by 1971.

Although many factors enter into a determination of land values, three factors could be mentioned in a superficial explanation of observed price levels: soil classification, general economic inflation and grain marketing. Land in Class 1 or Class 2 is usually worth more than land in Class 3 or Class 4. General economic inflation is, in time, reflected in higher prices for land. As grain marketing keeps pace with production, the pressure on land values is upward. If the supply of grain becomes too large relative to demand, however, the pressure on land values is downward. This is what happened after the 1968-69 crop year.

TABLE 2.4 REPRESENTATIVE LAND VALUES BY SELLING PRICE PER ACRE, 1963 TO 1971

	Number of	Total		Price per	Acre <sup>a</sup>
Year	Transactions	Acreage	Low	High	Average
			\$	\$	. \$
1963 1964 1965 1966 1967 1968 1969 1970	127 129 124 159 142 113 81 55	37,717 37,178 40,209 46,381 38,586 38,368 25,625 15,957 29,753	3.17 0.68 3.91 7.11 9.00 11.25 6.07 18.75 4.02	100.00 130.43 156.25 143.75 157.23 158.23 150.00 106.25 125.00	20.68 36.72 40.69 45.75 56.05 60.64 47.33 50.16 49.28

aLess improvements.

Source: Farm Credit Corporation, Regina, Saskatchewan.

#### Land Use

Tables 2.5, 2.6, and 2.7 present detailed information on land use at each delivery point in 1962-63, 1969-70 and 1970-71. Between 1962-63 and 1969-70, farm acreage in the study area increased by 125,860 acres or 3.2 percent. At the same time, uncultivated land decreased by 198,116 acres or 14.2 percent. Twelve delivery points closed or closed for storage only between 1962-63 and 1970-71, surrendering a total of 260,366 acres to neighboring points.

Of the 9 delivery points "too small to classify" that were open in 1969-70, 6 decreased in acreage between 1962-63 and 1969-70 and 3 increased in acreage. Of the 52 points in the other classifications, 2 were closed for storage only by 1969-70, 14 had fewer acres and 36 had more acres. In general the smaller communities had decreases in acreage between 1962-63 and 1969-70 and the larger communities had increases. 1

Relatively little change occurred in the pattern of land use between 1962-63 and 1969-70 in the study area. About 20-25 percent of the acreage was in summer fallow, 20 percent in wheat, 15 percent in oats and barley, 10 percent in other crops and the remaining 30-35 percent in uncultivated land. Rapeseed acreage increased almost fourfold.

In 1971 substantial changes in land use took place. They were primarily in response to Operation LIFT, a program designed by the federal government to reduce Canada's wheat surplus.<sup>2</sup> The greatest absolute changes from 1969-70 were in hard red spring wheat, which fell by 507,839 acres or 66.8 percent, in summer fallow which rose by 262,531 acres or 26.6 percent, and in rapeseed which increased by 166,026 acres or 50.6 percent.

It should be noted that "specified acres" as such disappeared in the 1970-71 crop year under Operation LIFT. For comparative purposes, however, a subtotal in Table 2.7 shows the crops that comprised specified acres in 1969-70. In the study area this acreage decreased by 7.5 percent.

<sup>&</sup>lt;sup>1</sup>The interested reader may wish to compare this data with that contained in Tables 3.2 and 3.15 which show changes in number of delivery permits issued and in average farm to elevator hauling distances.

<sup>&</sup>lt;sup>2</sup>LIFT is an acronym derived from "Lower Inventory For Tomorrow".

TABLE 2.5 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1962-63

Delivery Point	Wheat	Oats	Barley	Rye	Summer Fallow	Forage Crops	Specified Acres (Subtotal)	Durum	Flax	Rapeseed	Other	Uncult. Land	Total
Too Small to Classify   Hartwell   Acres   Percent	fy Storage only	only											
	Storage	only											
3 Bournemouth Acres Percent	1,009	1,380	632	1 1	1,875	373	5,269	1 1	0.1	0.1	7.0	5,103	10,563
4 Dulwich Acres Percent	3,606	1,693	565	272	3,699	1,114	10,949	30	300	60	110	6,816	18,265
5 Cleeves Acres Percent	3,871	2,127	883	220	3,657	2,463	13,221	1 1	1 1	125	188	8,625	22,159
6 Ormeaux Acres Percent	3,422	1,577	590	90	5,395	2,868	13,942	1 1	1 1	47	267	7,468	21,724
7 Ordale Acres Percent	4,018	2,332	1,357	837	4,769	2,285	15,598	1 1	1 1	25	201	10,353	26,177
8 Tallman Acres Percent	13,948	2,542	1,408	234	10,430	1,009	29,571	1 1	70	85	119	8,907	38,752 100.0
9 Kilwinning Acres Percent	Storage only	only											
10 Redberry Acres Percent	3,024	600	30	1 1	2,193	25	5,872	1 1	1 1	1 1	15	2,475	8,362
11 Scentgrass Acres	7,817	1,356	500	1 1	7,330	565	17,568	204	85	60	196	6,254	24,367
12 Polwarth Acres	2,981	867	1,101	1 1	4,225	446	9,620	1 1	1 1	538	136	3,709	14,003
13 Cater Acres	604	1,631	1,391	1 1	1,947	875	6,448	1 1	1 1	280	126	7,979	14,833
14 Brada Acres Percent	11,661	934	460	177	8,636	459	22,327	65	10	130	25	3,309	25,866
15 Lilac Acres Percent	12,032	2,517	1,057	1 1	10,629	618	2 <b>6</b> ,853 76.6	366	1 1	255	331	7,227	35,032
												(continued)	ued)

TABLE 2.5 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1962-63 (continued)

Participate   Participate	Delivery Point	Wheat	Oats	Barley	Rye	Summer Fallow	Forage	Specified Acres (Subtotal)	Durum	Flax	Rapeseed	Other Crops	Uncult. Land	Total
Freety 13,098 2,227 2,604 - 14,15 5.3 15.3	₩ (	6,624	2,478	926	1 1	5,618	2,049	17,695	42	115	235	198	22,601 55.2	40,886
Friend S. S. S. S. S. S. S. S. S. S. S. S. S.	& Sa	3,098	2,227	2,604	1 1	3,147	505	11,581	1 1	1 1	0.0	251	9,732	21,576
Acres 14,545 8,014 1,996 510 - 21,515 0.99 16,895 0.29 11,531 Acres 14,545 8.68 1.273 10.2 15,134 1,726 8,900 10.4 175 17.7 17.7 17.8 14,441 17.7 17.7 17.8 17.8 17.8 17.8 17.8 17.	let Ha	3,610	870	93	55	2,115	523	7,266	τ 1	t t	t I	100	6,875	14,241
Hamilian Harian Harian Harian Harian Harian Hamilian Hamilian Hamilian Hamilian Hamilian Harian Hamilian Hamili	χ :	8,014	1,996	510	1 1	6,106	269	16,895 59.4	1 1	1 1	1 1	29	11,531	28,455
Acres   15.9   1.51   2.179   343   4.638   1.106   12.835     -   786   137   5.514     Acres   26.6   3.65   1.291   8.85   13.83   1.373   325.28   4.77   6.0   6.0   6.0   6.3   6.0   6.3   6.0     Acres   26.6   6.5   2.8   1.291   8.85   13.833   1.373   325.284   9.0   0.1   0.3   0.3   0.3   0.3     Acres   26.4   2.4.7   2.174   1.740   -   2.7.0   2.7.6   2.7.684   9.0   0.1   0.3   0.2   0.2   0.3     Acres   32.7   2.174   1.740   -   2.7.0   2.7.6   2.7.684   9.0   0.1   0.3   0.2   0.2   0.3     Baparone   3.2.7   2.174   1.740   -   1.270   2.7.6   2.7.6   0.2   0.0   0.1   0.2   0.2   0.3     Baparone   3.2.7   2.174   1.740   -   1.270   2.7.6   2.7.6   0.2   0.0   0.1   0.2   0.2   0.0     Baparone   3.2.7   2.174   1.740   -   1.750   2.7.6   0.2   0.0   0.1   0.2   0.2   0.2   0.0     Acres   3.2.7   3.846   9.31   -   4.43   2.3   3.44   40.5   0.2   0.0   0.1   0.2   0.2   0.0     Acres   3.2.7   3.846   9.31   -   4.43   2.3   3.46   4.5.1   -   2.402   0.2   0.0   0.2   0.0   0.1   0.2   0.0     Acres   4.676   1.757   3.566   0.1   1.2.1   0.2   0.2   0.0   0.1   0.2   0.2   0.0   0.2   0.0     Acres   4.700   1.757   3.566   0.1   1.2.1   0.2   0.2   0.0   0.2   0.0   0.1   0.2   0.0	g ç	14,545	3,985	1,253	100	15,349	1,726	36,958 80.0	175	35	765	50	8,183	46,166
Acres 12,539 3,657 1,291 885 13,383 1,373 22,528 417 37 160 375 13,563 13,563 Acres 12,437 2,174 1,740 2 1 0,261 2,60 2 1 0,2 6 10,2 6	ت د	3,059	1,511	2,179	343	4,638	1,106	12,836 66.6	1 1	1 1	786	137	5,514	19,273
Reaching Agenesis         12,437         2,174         1,746         -         10,261         972         27,584         90         10         25         74         10,233           Acresal Ley Percent Agrees         4,629         2,573         3,508         -         10,261         17,666         -         -         471         51         15,464         95.9           Acresal Acres         4,629         7,55         10,33         -         1,948         17,666         -         -         471         515         15,464           Acres         4,629         7,5         10,3         -         1,948         17,666         -         -         4,61         57.9         -         4,64         1,57         57.9         1,45         15,66         1,75         1,45         1,57         1,57         1,45         1,57         1,40         1,25         1,40         1,40         1,25         1,40         1,	: ٿ	12,539	3,057	1,291	1.9	13,383	1,373	32,528 69.1	417	37	160	375	13,563	47,080
Acresic Harmonic Happanine Acresic Harmonic Happanine Ha	e Ve	12,437	2,174	1,740	1 1	10,261	972 2.6	27,584	90	0.0	25	74	10,233	38,016
Note   Court	re CO	4,629	2,573	3,508	1 1	5,008	1,948	17,666	1 1	1 1	471	515	15,464	34,116
Fairholme         3,279         3,846         951         -         4,047         647         12,770         -         67         169         297         14,982           Percent         11.6         13.6         3.3         -         14,03         2.3         45.1         -         6,79         10,458           Percent         1,325         2,960         571         -         2,492         704         8,052         -         -         6.5         10,458           Acres         1,325         2,960         571         -         13.3         2,328         773         2,328         77,095         -         -         13.1         219         21,990           Acres         4,676         1,757         3,556         5         4,773         2,328         17,095         -         -         131         219         21,990           Acres         4,730         3,356         1,835         40         4,792         1,648         16,401         -         -         -         8         50.2         12,805           Percent         15.9         2,136         240         14,480         3,013         37,413         175         0.4         0.		2,055	4,927	2,867	1 1	4,861	1,355	16,065	1 1	f 1	256	117	23,182 58.5	39,620
Acres 1,325 2,960 571 - 2,492 704 8,052 83 135 10,458 Percent 7.1 15.8 3.0 - 13.3 3.8 43.0 - 1 1,325	ra (	3,279	3,846	951	r I	4,047	647	12,770	T - I	67	169	297	14,982	28,285
Acres 4,676 1,757 3,556 5 4,773 2,328 17,095 131 219 21,990  Percent 11.8 4.4 9.0 0.1 12.1 5.9 43.3 131 219 21,990  Acres 4,730 3,356 1,835 40 4,792 1,648 16,401 8 502 12,805  Acres 14,164 3,320 2,196 240 14,480 3,013 37,413 175 195 185 137 10,398  Percent 29.2 6.8 4.5 0.5 29.9 6.2 77.1 0.4 0.4 0.4 0.4 0.3 21.4	Sa :	1,325	2,960	571	1 1	2,492	704	8,052	1 1	1 1	83	135	10,458	18,728
Acres 4,730 3,356 1,835 40 4,792 1,648 16,401 8 502 12,805 Acres 15.9 11.3 6.2 0.1 16.1 5.5 5.1 0.1 1.7 43.1  Prince Acres 14,164 3,320 2,196 240 14,480 3,013 37,413 175 195 185 137 10,398  Percent 29.2 6.8 4.5 0.5 29.9 6.2 77.1 0.4 0.4 0.4 0.3 21.4	Σ	4,676	1,757	3,556	0.1	4,773	2,328	17,095	1 1	1 1	131	219	21,990	39,435
Acres 14,164 3,320 2,196 240 14,480 3,013 37,413 175 195 185 137 10,398 Percent 29.2 6.8 4.5 0.5 29.9 6.2 77.1 0.4 0.4 0.4 0.3 21.4	9 0	4,730	3,356	1,835	40	4,792	1,648	16,401	1 1	1 1	0.1	502	12,805	29,716
	<u>~</u>	14,164	3,320	2,196	240	14,480	3,013	37,413	175	195	185	137	10,398	48,503

TABLE 2.5 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1962-63 (continued)

Total	58,450	51,006	22,751	43,929	38,003	41,844	37,827		70,593	46,589	90,265	64,551	53,477	62,452	59,577	74,184	ued)
Uncult. Land	11,531	8,412	3,705	23,811	16,425	11,540	15,042		28,589	24,951	21,091	20,088	21,552	34,318 54.9	19,174	24,684	(continued)
Other Crops	196 0.3	101	124	147	525	190	285		260	244	1,285	493	755	351	1,093	166	
Rapeseed	330	320	0.0	I 1	45	107	569		1 1	210	4,495	972	830	181	09	1 1	
Flax	250	1 1	1 1	1 1	1 1	40	1 1		1 1	0.1	30	0.0	0.0	100	147	20	
Durum	170	820	245	1 1	1 1	130	25		1 1	1 1	09	1 1	1 1	1 1	0.1	1 1	
Specified Acres (Subtotal)	45,973 78.6	41,353	18,667	19,971	21,008	29,837	21,906		41,744	21,177	63,304	42,981 66.6	30,334	27,502 44.0	39,099 65.6	49,314	
Forage	975	376	750	580	1,231	2,372	2,713		1,033	1,274	5,201	6,613	3,069	4,415	2,957	127	
Summer Fallow	18,058	16,250	6,697	7,064	7,088	10,726	8,550		13,909	7,592	24,198	10,584	7,296	7,677	15,546	18,024 24.3	
Rye	1 1	1 1	1 1	1 1	1 1	165	416		385	1 1	863	4,290	220	1 1	2,034	1 1	
Barley	1,542	1,544	750	994	3,225	2,223	968		1,319	1,709	10,049	8,101	5,346	1,605	1,748	700	
Oats	3,534	1,286	1,693	3,985	6,400	2,927	1,918		5,079	5,462	5,944	5,289	5,951	9,058	3,757	4,470	
Wheat	21,864	21,897	8,777	7,348	3,064	11,424	7,341		20,019	5,140	17,049	8,104	8,452	4,747	13,057	25,993 35.0	
Delivery Point	31 Richard Acres Percent						Acres Percent	Villages 38 Whitkow	Acres Percent	Acres Percent	Acres Percent	Acres Percent	Acres Percent	43 Livelong Acres Percent	Acres Percent	43 Arres Acres Percent	

TABLE 2.5 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1962-63 (continued)

Delivery Point	Wheat	Oats	Barley	Rye	Summer Fallow	Forage Crops	Specified Acres (Subtotal)	Durum	Flax	Rapeseed	Other Crops	Uncult. Land	Total
46 Medstead Acres Percent	2,156	7,570	3,400	1.1	8,053 15.8	2,019	23,198 45.6		1.1	236 0.5	525 1.0	26,934 52.9	50,893
	19,212	2,342	1,404	240	17,559	863	41,620 82.4	1 1	397	1 1	277	8,243	50,537
48 Mayfalr Acres Percent	6,403	5,899	1,257	1 1	8,328	1,155	23,042 45.9	1 1	1 1	135	244	26,769	50,190
	17,924	4,439	1,139	22 0.1	14,605	2,016	40,145	1 1	1 1	1 1	132	10,085	50,362
	10,772	7,022	2,081	0.1	11,589	5,652	37,196 58.0	13	49	977	776	25,070	64,081
	9,030	2,033	1,495	0.1	8,631	1,407	22,606 76.3	55	315	120	138	6,390	29,624
Sz Shell Lake Acres Percent	13,249	4,780	3,694	666	14,845	5,263	42,497 44.1	1 1	20	695	601	52,461	96,274
53 Kabbit Lake Acres Percent	7,975	6,583	2,620	1 1	12,456	1,141	30,775 57.4	1 1	1 1	526	594	21,681	53,576
34 marcelin Acres Percent	24,269	4,954	4,935	1,769	18,940	2,636	57,503	110	95	173	173	19,553	77,607
Towns													
So Debden Acres Percent	11,247	6,997	5,282	115	17,440	7,470	48,551	1 1	35	1,663	1,022	40,143	91,414
	8,845	8,657	7,611	1 1	14,493	4,369	43,975 55.9	1 1	115	896	1,067	32,605	78,658
	34,738	11,597	4,358	613	29,855	3,487	84,648 76.3	203	70	30	195	25,709	110,855
	17,311	8,344	1,880	1,517	19,303	8,018	56,373 60.8	265	1 1	390	457	35,282	92,767
Acres Percent	25,342	6,355	5,885	123	22,941	2,335	62,981	480	1 1	0.1	80	14,511	78,092
ou tanwood Acres Percent	26,440	10,608	9,389	275	35,483	7,968	90,163	1 1	h 1	2,708	1,262	37,344	131,477
												(continued)	ed)

TABLE 2.5 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1962-63 (concluded)

Total	104,141	128,481	39,638	72,505	150,286	116,736	155,204	399,280	72,381	3,914,756	56,218,393
Uncult. Land	55,197	45,745	20,861	25,568	43,279	43,102	42,712	157,970	14,403	1,392,266	12,195,975
Other Crops	833	470	447	586	700	1,001	882	1,926	597	26,129	257,875
Rapeseed	970	53	241	1.0	959	1,295	4,404	11,021	634	41,994	151,889
Flax	49	1 1	0.1	1 1	190 1.0	85	25	313	1 1	3,307	346,557
Durum	0.0	1 1	0.0	1 1	130	1 1	17	1 1	1 1	4,296	2,706,327
Specified Acres (Subtotal)	47,090	82,213	18,080	45,653	105,028	71,253	107,164	228,050	56,747	2,446,764	40,559,770
Forage Crops	4,814	3,000	4,452	5,188	8,498	5,464	9,170	20,186	2,509	186,032	1,755,699 4
Summer Fallow	11,750	27,676	4,901	14,110	31,861	23,764	37,126	61,377	23,231	838,431	17,922,504
Rye	28	167	1 1	0.0	10,521	27	4,400	738	1 1	33,272	359,911 1
Barley	4,428	2,089	2,758	2,941	7,973	11,885	18,350	46,697	2,350	233,778	
Oats	12,140	8,792	3,522	9,182	9,684	9,605	10,476	38,433	3,950	331,310 8.5	3,260,029 1,806,685 5.8 3.2
Wheat	10,930	40,489	2,447	14,142	36,491	20,508	27,642	60,619	24,707 34.1	823,941	tal 15,454,942 3, 27.5
Delivery Point	61 Glaslyn Acres Percent	Acres Percent 63 Rig River		Acres Percent 65 Leask	Acres	Greater Towns 66 Spiritwood Acres Percent 67 Challback	Acres Percent	Acres Percent	Cities 69 North Battleford Acres Percent	Study Area Total Acres Percent	Saskatchewan Total Acres 15, Percent

Source: Canadian Wheat Board, Winnipeg.

TABLE 2.6 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1969-70

Total	13,094 100.0		16,008	24,109		28,561	13,361		26,614	32,090	(P
Uncult. Land	5,099 39.0		5,948	3,642		9,377	2,720		3,356	5,764	(continued)
Other Crops	89 7.0		1 1	351		73	200		100	168	
Rapeseed	293 2.2		9.0	175		534	1,041		1.7	1,687	
Flax	85 0.6		f I	298		7.0	1 1		30	1.0	
Specified Acres (Subtotal)	7,528 57.5		9,965	19,643		18,570	9,400		22,680	24,456	
Forage Crops	484 3.7		2,051	187		1,362	3.9		228	631	
Summer Fallow	3,354 25.6		2,567	8,833		8,113	4,301		10,561	35.2	
Rye	1.1		344	1 1		200	1 1		250	1.0	
Barley	1,675		1,450	1,166		719	1,504		1,380	2,023	
Oats	715		1,202	1,214		1,406	851		3.6	1,490	
Durum	1.1		1 1	t I	yly	85	1 1	yln	85	120	
Wheat	1fy Closed Closed 1,300	Closed	2,351	8,243 34.2 Closed	Storage only	6,685	2,226	Storage only	9,215	8,870	
Delivery Point	Too Small to Classify 1 Hartwell 2 Acres 2 Cameo Acres 3 Bournemouth Acres Acres Acres Percent	4 Dulwich Acres Percent 5 Cleeves Acres Percent 6 Ormeaux Acres	Percent 7 Ordale Acres Percent	Acres Percent 9 Kilwinning Percent	10 Redberry Acres Percent			Acres Percent 14 Rrada	Acres Percent	Acres Percent	

TABLE 2.6 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1969-70 (continued)

1,192         -         1,380         1,794         1,794         -         40         588         10,138         20,333           2,973         -         1,62         1,186         10,475         -         -         40.7         -         10.2         2.6         100.0
50         3,172         642         9,333         -         -         73         10,441         1           50         3,172         642         9,333         -         -         -         73         10,441         1           6.2         3,172         6,636         2,22         16,800         70         690         345         10,441         1           6.2         6,635         2,23         16,800         70         690         345         10,441         1           6.2         6,635         2,21         43,517         436         2,24         1,23         37.6           6.4         18,990         2,211         43,517         436         6.881         12.6           6.4         15,986         1,825         34,176         436         6.3         12.6           6.4         15,986         1,825         34,176         436         6.3         12.6           6.4         15,988         1,989         769         28,434         193         1,282         273         24,99           1.2         17,399         1,999         2,948         2,948         2,99         2,28           1.2 <t< td=""></t<>
50         3,172         642         9,333         -         -         73         10,441         10         10,441         10         10,441         10         10,441         10
55         6,635         225         16,800         70         690         345         10,773         225           0.2         23.1         0.8         58.6         0.2         2.4         1.2         37.6           222         18,990         2,211         43,517         435         5.64         1.2         37.6           0.4         15,985         1,825         34,176         45         2,260         135         12.349           1.3         15,985         1,825         34,176         45         2,260         0.3         25.2           1.0         11,989         769         28,434         193         1,282         273         24,9           1.2         11,989         769         28,434         193         1,282         273         24,9           1.2         17,39         4,350         33,517         -         1,4         0.5         1,4         0.5         1,4           1.         4,342         20,899         -         1,6         6,19         1,4         0.5         1,6         1,4         0.5         1,4         0.5         1,4         0.5         1,4         0.5         1,4         0.5 <t< td=""></t<>
222       18,990       2,211       43,517       435       3,634       168       6,881       12.6         0.4       34.8       4,0       79.7       0.8       3,634       168       6,881       12.6         0.4       15,985       1,825       34,176       45       2,260       135       12,349         1.3       11,989       769       28,444       193       1,282       273       3,992         1.2       11,989       769       28,444       193       1,282       273       3,992         1.2       120       9,342       4,350       31,517       -       781       26.2       19,587         1.2       17,3       4,350       31,517       -       1,44       0.5       19,587         1.       60       5,062       1,314       14,156       -       1,205       50       13,448         1.       20,3       1,154       14,156       -       1,7       0.2       13,448         1.       41,04       2,722       13,946       -       1,7       0.3       1,7       44,10         1.       41,04       2,722       13,946       -       0.3       1,7<
640 15,985 1,825 34,176 45 2,260 135 12,349 25.2  - 11,989 769 28,434 193 1,282 273 9,992 10.2  - 12,934 4,350 33,517 - 781 262 19,587 24.9  - 6,704 2,934 20,890 - 1,066 617 18,175 44.6  - 7,197 1,310 19,005 - 1,205 509 13,448 35.0  - 7,197 1,540 14,156 - 1,205 509 13,448 35.0  - 4,104 2,722 13,946 - 90 460 12,843 1.5  - 4,104 2,722 13,946 - 0.3 1.7 45.843  - 15,0 10.0 54,328 46,348 320 2,073 99 16,356 0.5  - 20,3 4,328 46,348 320 2,073 99 16,356 0.5
640         15,985         1,825         34,176         45         2,260         135         12,349           1,3         32.7         3.7         69.8         0.1         4.6         0.3         12,349           -         11,989         769         28,434         193         1,282         273         9,992           -         120         9,342         4,350         33,517         -         781         262         19,587           0.2         17.3         4,350         33,517         -         781         262         19,587           -         6,704         2,934         20,890         -         1,066         617         18,175           -         16.4         7.2         51.3         -         1,266         617         18,175           -         7,197         1,310         19,005         -         1,266         617         44.6           60         5,062         1,154         14,156         -         1,265         509         13,448           -         2,03         4,6         2,722         13,946         -         1,7         415         41,04           -         4,104         2
-         11,989         769         28,434         193         1,282         273         9,992           -         29,342         4,350         33,517         -         781         262         19,587           0.2         17.3         4,350         33,517         -         781         262         19,587           -         6,704         2,934         20,890         -         1,066         617         18,175           -         7,197         1,310         19,005         -         1,266         617         18,175           -         7,197         1,310         19,005         -         1,266         617         18,175           -         2,107         3.8         55.6         -         1,5         44.6           -         2,197         1,154         14,156         -         415         6.2         10,283           0.2         20.3         4,6         56.8         -         1,7         41.3           -         4,104         2,722         13,946         -         0.3         1,7         47.0           -         15.0         6.6         6.6         6.0         6.0         10.2
120       9,342       4,350       33,517       -       781       262       19,587         0.2       17.3       8.0       61.9       -       1,4       0.5       19,587         -       6,704       2,934       20,890       -       1,066       617       18,175         -       7,197       1,310       19,005       -       1,205       509       13,448         -       2,062       1,154       14,156       -       415       55       10,283         0.2       2,062       1,154       14,156       -       1,7       0.2       41.3         -       4,104       2,722       13,946       -       0.3       460       12,843         -       15.0       10.0       51.0       -       0.3       460       12,843         -       2,722       13,946       -       0.3       1,7       47.0         -       2,94       6.6       6.6       77.1       0.5       3.2       0.1       16,356
-       6,704       2,934       20,890       -       1,066       617       18,175         -       16,4       7.2       51.3       -       2.6       1.5       44.6         -       7,197       1,310       19,005       -       1,205       509       13,448         60       5,062       1,154       14,156       -       415       55       10,283         0.2       20.3       4.6       56.8       -       41.7       0.2       41.3         -       4,104       2,722       13,946       -       90       460       12,843         -       15.0       10.0       51.0       -       0.3       1.7       47.0         335       19,136       46,348       320       2,073       99       16,356         0.5       29.4       6.6       71.1       0.5       3.2       0.1       25.1
- 7,197 1,310 19,005 - 1,205 509 13,448 - 21.1 3.8 55.6 - 3.5 1.5 35.4  60 5,062 1,154 14,156 - 415 55 10,283  0.2 2,0.3 4,104 2,722 13,946 - 90 460 12,843  - 4,104 2,722 13,946 - 0.3 1,7 45,843  - 15.0 19,136 4,328 46,348 320 2,073 99 16,356  0.5 29.4 6.6 71.1 0.5 3.2 0.1 255.1
60 5,062 1,154 14,156 - 415 55 10,283 0.2 20.3 4.6 56.8 - 1,7 0.2 41.3 - 4,104 2,722 13,946 - 90 460 12,843 - 15.0 10.0 51.0 - 10.3 1.7 47.0 335 19,136 4,328 46,348 320 2,073 99 16,356 0.5 29.4 6.6 71.1 0.5 3.2 0.1 25.1
- 4,104 2,722 13,946 - 90 460 12,843 - 15.0 10.0 51.0 - 0.3 1.7 47.0 51.0 - 0.3 1.7 47.0 - 460 12,843 1.7 47.0 47.0 51.0 - 0.3 1.7 47.0 51.0 - 0.3 1.7 47.0
335 19,136 4,328 46,348 320 2,073 99 16,356 0.5 29.4 6.6 71.1 0.5 3.2 0.1 25.1
335 19,136 4,328 46,348 320 2,073 99 16,356 0.5 29.4 6.6 71.1 0.5 3.2 0.1 25.1

TABLE 2.6 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1969-70 (continued)

Total	58,228	61,398	23,266	28,764	33,474	39,012	31,676		34,006	30,673	123,264	58,567	58,405	63,923	65,838	74,240	(pa
Uncult. Land	10,638	8,207	2,925	13,137	9,536	9,385	11,462		13,241	14,100	24,736	14,505	18,006	34,497	18,166	21,138	(continued)
Other Crops	58	75	80	352	1.5	520	1.5		40	330	163	108	494	649	961	80	
Rapeseed	1,420	3,755	1,355	30	325	695	1,522		790	773	11,811	3,839	3,591	982	2,750	540	
Flax	262 0.4	70	1 1	1 1	ŧ ŧ	1 1	1 1		1 1	1 1	613	f 1	15	1 1	1 1	90	
Specified Acres (Subtotal)	45,850 78.8	49,291	18,906	15,245	23,119	28,412	18,219		19,935	15,470 50.4	85,941	40,115	36,299	27,795	43,961	52,392 70.6	
Forage Crops	1,087	793	3.9	448 1.6	1,208	1,801	2,981		642	1,502	6,876	8,322	4,724	4,531	5,607	2,288	
Summer Fallow	20,782	22,141	7,327	5,634	9,289	11,221	6,803		8,008	5,708	36,991	10,820	9,957	8,606	17,349	21,710	
Rye	203	408	50	65	1 1	960	362		25	t 1	1,089	2,079	202	122	2,114	1 1	
Barley	3,087	3,137	1,508	1,645	5,852	2,316	1,832		1,168	2,926	16,335	9,269	5,886	5,415	3,570	1,643	
Oats	2,269	1,542	1,335	2,437	3,566	2,486	962		1,508	2,265	5,209	3,739	6,418	5,936	2,031	3,481	
Durum	690	470	1 1	1 1	1 1	210	1 1		1 1	1 1	25	1 1	20	Į į	120	1 1	
Wheat	17,732	20,800	7,785	5,016	3,204	9,418	5,279		8,584	3,069	19,416	5,886	9,098	3,185	13,170	23,270	
Delivery Point							3/ Mont Nebo Acres Percent	Villages	Acres Percent	39 Mullingar Acres Percent		41 Parkside Acres Percent				45 Krydor Acres Percent	

TABLE 2.6 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1969-70 (continued)

Total	77,190	53,784	54,149	53,270	64,947	26,537	97,305	84,850	79,403		130,035	82,639	109,885	116,594	79,884	150,386
Uncult. Land	31,772	5,703	24,184	8,521	21,579	6,482	44,938	29,069	18,402		37,313	32,971	22,233	38,041	12,671	32,990
Other Crops	1,479	398	668	441	515	325	1,170	721	1,049		1,433	1.0	251	985	78 0.1	1,090
Rapeseed	1,419	870	711	280	2,731	1,229	1,033	3,835	1,297		4,544	1,472	213	2,950	1,082	11,760
Flax	0.1	445	1 1	1 1	144	427	1 1	75	465		85	0.0	49	100	180	86
Acres (Subtotal)	42,514	46,368	28,586 52.8	44,028	39,978	18,074	50,164	51,150	58,190		86,660 66.6	47,389	87,139	74,518	65,873 82.5	104,460
Forage Crops	5,411	628	1,501	2,243	4,204	1,768	7,439	1,561	4,028		15,040	7,132	5,920	11,311	4,124	9,912
Summer Fallow	13,635	21,708	11,835	18,465	16,144	8,213	17,648	21,686	20,275		31,611	15,164	32,780	25,901	27,130	45,705
Rye	1 1	1 1	80.0	187	153	1 1	273	100	1,031		1.0	131	581	2,416	241	551
Barley	10,700	3,176	3,884	1,587	4,633	1,516	7,579	9,167	6,636		12,740	10,980	8,449	5,529	6,257	15,077
Oats	7,393	2,228	3,665	3,115	4,903	476	5,179	5,776	3,957		6,608	6,486	8,200	8,367	5,650	6,253
Durum	1 1	266	1 1	1 1	1 1	1 1	1 1	1 1	295		1 1	1 1	329	160	1,020	1 1
Wheat	5,375	18,362	7,693	18,431	9,947	6,101	12,046	12,860	21,968		20,646	7,496	30,880	20,834	21,451	26,962
Delivery Point	46 Medstead Acres Percent			Acres Percent	Acres Percent				Acres	<i>Towns</i> 55 Debden	Acres Percent	Acres Percent			Acres Percent	oo canwood Acres Percent

TABLE 2.6 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1969-70 (concluded)

Delivery Point	Wheat	Durum	Oats	Barley	Rye	Summer Fallow	Forage Crops	Specified Acres (Subtotal)	Flax	Rapeseed	Other Crops	Uncult. Land	Total
61 Glaslyn Acres Percent	12,370	1 1	8,559	9,334	190	17,883	6,627	54,963 53.9	100	2,373	1,148	43,367	101,951
62 Hafford Acres Percent	36,073	1 1	7,931	6,264	273	37,174	5,810	93,525	45	774 0.5	996	47,375	142,685
63 Big River Acres Percent	2,730	1 1	3,869	5,411	1 1	7,347	8,026	27,383	1 1	1,122	513	23,724	52,742
64 lurtletord Acres Percent	18,723	1 8	7,621	10,633	176	24,672	6,796	68,621	B - I	4,385	2,735	32,093 29.8	107,834
ob Leask Acres Percent	35,528	420	7,794	15,160	5,285	35,824	17,733	117,744	55	4,234	1,634	35,848	159,515
Greater Towns 66 Spiritwood Acres Percent	19,321	1 1	8,793	24,636	228	29,424	9,553	91,955	09 .	3,526	499	48,371	144,411
o/ Snellbrook Acres Percent	24,928	1 1	6,084	17,382	3,283	43,755	10,202	105,634	50	11,563	373	31,843	149,463
b8 Meadow Lake Acres Percent	60,100	45	30,152	49,336	818	66,853	24,862	232,166	420	39,979	6,599	129,528	408,692
Cities 69 North Battleford Acres Percent	eford 26,988 28.1	972	3,813	4,305	812	31,805	2,889	71,584	120	6,659	637	17,048	96,048
Study Area Total Acres Percent	760,274	5,601	243,557	368,358	26,717	988,660 24.5	249,354	2,642,521	5,467	162,168	36,310	1,194,150	4,040,616
Saskatchewan Total Acres Percent	15,872,495 27.8	2,606,821	2,398,645	2,984,539	518,900	19,211,660	2,108,161	45,701,221	678,036	821,577	270,865	9,682,344	57,154,043 100.0

Source: Canadian Wheat Board, Winnipeg.

TABLE 2.7 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1970-71

10,584 780 16,961 555 1,853 - 3,420 22,789 1,655 3.4 74.5 2.4 8.1 - 15.0 100.0	Dats Barley Rye	
780 16,961 555 1,853 - 15.0 3.4 74.5 2.4 8.1 - 15.0 1,521 16,269 314 3,052 160 10,142 5.1 54.3 1.1 10.2 0.5 33.9 789 8,153 - 2,027 120 4,604 5.3 54.7 - 13.6 0.8 30.9 624 19,644 123 3,161 19 3,021 2.4 75.6 0.5 12.2 0.1 11.6 1,055 20,326 341 4,653 78 5,839 3.4 65.1 1,16		
780 16,961 555 1,853 - 15.0 3.4 74.5 2.4 8.1 - 15.0 1,521 16,269 314 3,052 160 10,142 5.1 54.3 1.1 10.2 0.5 33.9 789 8,153 - 2,027 120 4,604 5.3 54.7 - 13.6 0.8 30.9 624 19,644 123 3,161 19 3,021 2.4 75.6 0.5 341 4,653 78 5,839 3.4 75.6 0.5 11.6		
780 16,961 555 1,853 - 15.0 3.4 74.5 2.4 8.1 - 15.0 1,521 16,269 314 3,052 160 10,142 5.1 54.3 1.1 10.2 0.5 33.9 789 8,153 - 2,027 120 4,604 5.3 54.7 - 13.6 0.8 30.9 624 19,644 123 3,161 19 3,021 2.4 75.6 0.5 12.2 0.1 11.6 1,055 20,326 341 4,653 78 5,839 3.4 65.1 1.1 14.9 0.2 18.7		
780 16,961 555 1,853 - 15.0 3.4 74.5 2.4 8.1 - 15.0 1,521 16,269 314 3,052 160 10,142 5.1 54.3 1.1 10.2 0.5 33.9 789 8,153 - 2,027 120 4,604 5.3 54.7 - 13.6 0.8 30.9 624 19,644 123 3,161 19 3,021 2.4 75.6 0.5 341 4,653 78 5,839 3.4 65.1 1.1 1,1 14.9 0.2 18.7		
780 16,961 555 1,853 - 15.0 3.4 74.5 2.4 8.1 - 15.0 1,521 16,269 314 3,052 160 10,142 5.1 54.3 1.1 10.2 0.5 33.9 789 8,153 - 2,027 120 4,604 5.3 5.4 75.6 0.5 12.2 0.1 11.6 1,055 20,326 341 4,653 78 5,839 3.4 65.1 1.1 14.9 0.2 18.7		
780 16,961 555 1,853 - 15.0 3.4 20 3.4 20 3.4 20 1,521 16,269 314 3,052 160 10,142 5.1 54.3 1.1 10.2 0.5 33.9 789 8,153 - 2,027 120 4,604 5.3 54.7 - 2,027 120 4,604 5.3 54.7 - 13.6 0.8 30.9 1,055 20,326 341 4,653 78 5,839 3.4 65.1 1.1 14.9 0.2 18.7		
780 16,961 555 1,853 - 15.0 3,420 3,4		
1,521 16,269 314 3,052 160 10,142 5.1 54.3 1.1 10.2 0.5 33.9 789 8,153 - 2,027 120 4,604 5.3 54.7 - 13.6 0.8 30.9 624 19,644 123 3,161 19 3,021 2.4 75.6 0.5 12.2 0.1 11.6 1,055 20,326 341 4,653 78 5,839 3.4 65.1 1.1 14.9 0.2 18.7	044 1,961 137 4.6 8.6 0.6	
1,521     16,269     314     3,052     160     10,142       5,1     54.3     1.1     10.2     0.5     33.9       789     8,153     -     2,027     120     4,604       5.3     54.7     -     13.6     0.8     30.9       624     19,644     123     3,161     19     3,021       2.4     75.6     0.5     12.2     0.1     11.6       1,055     20,326     341     4,653     78     5,839       3.4     65.1     1.1     14.9     0.2     18.7		
1,521 16,269 314 3,052 160 10,142 5.1 54.3 1.1 10.2 0.5 33.9 789 8,153 - 2,027 120 4,604 5.3 54.7 - 13.6 0.8 30.9 624 19,644 123 3,161 19 3,021 2.4 75.6 0.5 12.2 0.1 11.6 1,055 20,326 341 4,653 78 5,839 3,4 65.1 1.1 14.9 0.2 18.7		Storage only
789 8,153 - 2,027 120 4,604 5.3 54.7 - 13.6 0.8 30.9 624 19,644 123 3,161 19 3,021 2.4 75.6 0.5 12.2 0.1 11.6 1,055 20,326 341 4,653 78 5,839 3.4 65.1 1.1 14.9 0.2 18.7	421 1,438 455 4.7 4.8 1.5	
624 19,644 123 3,161 19 3,021 2.4 75.6 0.5 12.2 0.1 11.6 1,055 20,326 341 4,653 78 5,839 3.4 65.1 1.1 14.9 0.2 18.7	604 1,582 20 4.1 10.6 0.1	
624 19,644 123 3,161 19 3,021 2.4 75.6 0.5 12.2 0.1 11.6 1,055 20,326 341 4,653 78 5,839 3.4 65.1 1.1 14.9 0.2 18.7		Storage only
1,055 20,326 341 4,653 78 5,839 3.4 65.1 1.1 14.9 0.2 18.7	375 1,060 875 1.4 4.1 3.4	1,060
	550 1,690 40 5.0 5.4 0.1	

TABLE 2.7 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1970-71 (continued)

Delivery Point	Wheat	Durum	Oats	Barley	Rye	Summer Fallow	Forage	Subtotal	Flax	Rapeseed	Other Crops	Uncult. Land	Total
16 Iffley Acres Percent 17 Ranger Acres Percent	1,628 7.0 Closed	1 1	1,556	1,136	151	5,678 24.1	1,772	11,921	100	310	0.3	11,124	23,535
Hamlets 18 Hatherleigh Acres Percent	Storage only	وار											
	1,936	0.3	920	1,669	80	7,585	426	12,686 51.3	310	2,162	239	9,303	24,700
20 Hamin Acres Percent	2,490	58	2,143	4,065	178	24,205	3,626	36,765	765	10,315	246	7,475	55,566
	Storage only	yln											
	2,535	1 1	2,183	3,861	601	17,226	3,083	29,489	285	6,432	199	13,019	49,424
	3,610	1 1	1,895	3,571	1 1	16,097	1,142	26,315 63.5	1.0	4,241	27	10,457	41,455
	3,389	1 1	4,755	8,774	1 1	14,802	5,429	37,149 59.5	185	1,766	572 0.9	22,761	62,433
	527	1 1	2,727	4,398	235	8,252	3,346	19,485	3.0	1,847	276	18,554	40,192
	1,353	1 1	2,394	1,558	1 1	6,802	2,219	14,326	1 1	2,275	141	10,882	27,624
	658	1 1	2,565	2,489	8 8	8,422 29.7	1,060	15,194	1 1	1,969	120	11,113	28,396
	490	E 1	1,479	3,610	1 1	5,191	3,413	14,183	1 1	928	165	13,177	28,353
	Storage only	ylno											
30 Prince Acres Percent	4,559	1 1	2,680	4,600	488	23,760	5,858	41,945	473	6,028	162	18,065	66,673
												(continued)	(pad)

TABLE 2.7 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1970-71 (continued)

Total	55,715	61,176	23,309	28,800	32,898	39,625	30,194		46,681	27,458	123,736	54,889		65,515	65,273	75,739
Uncult. Land	11,062	8,834	3,295	13,459	9,403	10,047	10,601		19,039	12,835	24,919	13,762		34,844	18,927	22,005
Other Crops	4 1	18	1 1	55	138	80	50		100	60	172	0.1		421	0.0	80
Rapeseed	5,459	9,291	1,824	19	1,276	1,895	2,657		2,311	979	18,935	4,234		2,266	7,463	3,354
Flax	1,086	135	40	0.0	1 1	55	1 (		128	1 1	946	1 1		1 1	1 1	268
Subtotal	38,108 68.4	42,898	18,150	15,257	22,081	27,548 69.5	16,886		25,103	13,584	78,764	36,885		27,984	38,878	50,032
Forage Crops	2,062	1,476	1,101	665	1,838	3,008	3,310		1,660	1,582	9,712	8,752		5,220	7,360	3,261
Fallow	25,650	31,810	11,887	7,640	10,281	15,643	8,106		14,249	6,221	41,919	13,278		10,483	18,296	29,142
Rye	330	183	160	62	60	332	340		47	115	1,194	1,415		25	2,122	1 1
Barley	3,612	2,553	1,729	2,111	5,847	2,613	1,250		1,581	2,517	13,034	8,165		5,074	3,575	3,334
Oats	2,688	1,323	1,217	2,491	3,134	2,484	916 3.0		2,007	2,273	4,728	3,569		6,286	2,522	3,845
Durum	897	875	310	135	1 1	235	1 1		1 1	1 1	105	l į	>	1 1	1 1	111
Wheat	2,869	4,678	1,746	2,153	921	3,233	2,964		5,565	876	8,072	1,706	Storage only	896	5,003	10,339
Delivery Point	31 Richard Acres Percent							Villages 38 Whitkow	Acres Percent 39 Mullingar		Acres Percent		Acres Percent	43 Livelong Acres Percent	Acres Percent	Acres Percent

TABLE 2.7 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1970-71 (continued)

1,470   1,470   1,831   1,832   1,833   1,842   1,833   1,842   1,833   1,842   1,833   1,842   1,833   1,842   1,833   1,842   1,833   1,842   1,833   1,842   1,833   1,842   1,833   1,842   1,833   1,84	Delivery Point	Wheat	Durum	Oats	Barley	Rye	Fallow	Crops	Subtotal	Flax	Rapeseed	Crops	Land	Total
Acres 6,098 606 1,831 3,842 85 31,092 899 43,353 1,200 3,649 134 Cheres 6,00 4,00 4,00 4,00 4,00 4,00 4,00 4,00	46 Medstead Acres Percent	1,470	1 1	6,593	9,624	1 1	16,179	6,397	40,263	15	2,262	66	31,279	73,885
Walting State         5,446         6,108         4,400         40         15,898         1,788         29,967         125         2,993         735           Percent         6,1         6,15         4,200         2,1         22,9         1,289         1,289         2,967         1,299         2,967         1,299         2,988         1,788         2,967         1,29         2,148         0.0         2,448         0.0         2,448         0.0         2,448         0.0         2,448         0.0         2,448         0.0         2,548         0.0         2,548         0.0         2,548         0.0         2,548         0.0         2,548         0.0         2,548         0.0         2,548         0.0         2,548         0.0         2,548         0.0         2,548         0.0         2,548         0.0 <td>Speers Acres Percent</td> <td>5,098</td> <td>506</td> <td>1,831</td> <td>3,842</td> <td>85</td> <td>31,092</td> <td>899</td> <td>43,353</td> <td></td> <td>3,649</td> <td>134</td> <td>5,910</td> <td>54,246</td>	Speers Acres Percent	5,098	506	1,831	3,842	85	31,092	899	43,353		3,649	134	5,910	54,246
Mornet         5,446         75         3,507         2,972         235         27,078         2,672         41,985         -         2,544         0.0           Percent         10.3         0.1         6,6         5,6         0.5         0.5         0.5         0.5         0.6         6.0         0.6         6.0         0.5         0.6         0.5         0.6         0.5         0.5         0.5         0.5         0.6	Mayfair Acres Percent	3,755	50	4,036	4,400	40	15,898	1,788	29,967	125	2,993	735	27,625	61,445
Acres         5,308         60         4,466         6,685         193         16,513         4,664         37,889         503         5,668         394           Percent         8.1         0.1         6.8         10.2         0.3         25.2         7,1         57.8         0.8         6.6         6.6         6.8         10.2         0.3         25.2         7,4         17,088         55.2         6.8         8.0         0.2         2.6         8.6         8.6         9.6         9.6         9.3         9.3         9.3         9.3         9.2         2.44         17,088         5.5         2.6         8.6         9.0         9.3	∑ Z	5,446	75	3,507	2,972	235	27,078 50.9	2,672 5.0	41,985	ı t	2,544	20 0.0	8,639	53,188
Percent   1,839   69   522   1,835   95   10,582   7,99   67.9   62.8   9.5	50 Mervin Acres Percent	5,308	09	4,466	6,685	193	16,513	4,664	37,889 57.8	503	5,668	394	21,095	65,549
the 3,952 - 4,432 7,561 268 22,043 10,164 68,410 - 2.926 2.3	Meota Acres Percent	1,839	69	522	1,835	95	10,582	2,146	17,088	55	2,664	802	6,571	27,180
biblit Lake         5,001         -         6,113         9,388         746         30,019         3,565         54,832         62         9,100         175           Acreel         Acreel         4,99         -         6,113         9,388         746         30,019         3,565         54,832         62         9,100         175           Acreel         Acreel         6,392         172         3,192         8,492         324         29,911         6,356         54,841         493         4,463         4,556         0.0         0.0         0.0         27,53         8,896         6,933         19,93         9,091         320         0.0         66.1         37,041         21,553         83,739         9,091         4,463         4,556         0.0         22,756         8,896         51,553         6,21         0.0         6.8         0.0         27,453         8,896         51,253         8,191         8,191         8,191         8,191         8,191         8,191         8,191         8,191         8,191         9,191         9,191         9,191         9,191         9,191         9,191         9,191         9,191         9,191         9,191         9,191         9,191         9,191	Shell Lake Acres Percent	3,952	1 1	4,432	7,561	268	22,043	10,154	48,410	1 1	2,826	272 0.3	43,972	95,480
Acres         6,392         172         3,192         8,492         324         29,911         6,358         54,841         493         4,463         455           Acres         8.1         0.2         4,0         10.8         0.4         37.8         59,911         6,358         54,841         493         4,463         455           Percent         7.530         -         5,373         12,177         65         37,041         21,553         62,13         9,091         320         0.6           Acres         1,697         -         6,643         12,177         65         37,041         21,553         62,12         0.2         62,13         62,13         9,091         30,03           Acres         1,697         -         6,643         12,137         0.1         23.2         16,01         23.2         17,35         0.1         3,09         30,03           Acres         14,942         813         8,922         10,040         424         42,796         8,191         86,128         1,57         0.1         3,33         0.3           Acres         8,953         -         7,4         42,3         3,43         3,43         4,43         4,1	Rabbit Lake Acres Percent	5,001	1 1	6,113	9,388	746	30,019	3,565	54,832	62	9,100	175	37,729	101,898
Acres 7,530 - 6,643 12,177 65 37,041 21,553 83,739 199 9,091 320 80,118	Ma	6,392	172	3,192	8,492	324	29,911	6,358	54,841	493	4,463	455	18,874 23.9	79,126
shift files for the files for	1.5 Dobdon													
t l,697	Acres Percent	7,530	1 1	5,373	12,177	0.0	37,041	21,553	83,739	199	9,091	320	41,408	134,757
Acres 14,942 813 8,922 10,040 424 42,796 8,191 86,128 156 1,821 73  Acres 13.6 0.7 8.1 0.4 0.4 42,796 8,191 86,128 156 1,821 73  Acres 8,953 - 7,139 6,933 1,932 27.1 11.3 59.6 0.0 6.2 6.2 0.9  Radisson Acres 12.6 1,281 4,522 6,755 283 34,368 5,409 62,607 451 3,236 173  Acres 7,919 40 7,007 14,808 255 53,952 13,948 97,929 90 23,036 304  Acres 7,919 40 7,007 14,808 255 53,952 13,948 97,929 90 23,036 304  Percent 5.0 0.1 4,4 9,4 9,4 0.2 34,2 8.8 62.1 0.1 14.6 0.2	Leoville Acres Percent	1,697	1 1	6,643	12,638	20	21,375	8,886	51,259	70	3,090	307	37,334	92,060
Edam         Acres         8,953         -         7,139         6,933         1,932         32,002         13,347         70,306         45         7,318         1,002           Percent Acres         7.6         -         6.1         5.9         1.6         5.9         1,281         4,522         6,755         283         34,368         5,409         62,607         451         3,236         173           Percent Percent         12.6         1.6         5.7         8.5         0.3         43,33         6.8         7,818         0.6         4.1         0.2           Acres         7,919         40         7,007         14,808         255         53,952         13,948         97,929         90         23,036         304           Percent         5.0         0.1         4.4         9.4         0.2         34,2         8.8         62.1         0.1         14.6         0.2         34,2         8.8         62.1         0.1         14.6         0.2         34,2         8.8         62.1         0.1         14.6         0.2         34,2         8.8         62.1         0.1         14.6         0.2         34,2         8.8         62.1         0.1	90	14,942	813	8,922	10,040	424 0.4	42,796	8,191	86,128	156	1,821	73	22,105	110,283
Radisson Acres9,989 1,2811,281 5,74,522 5,76,755 8,5283 0.334,368 43.35,409 6,862,607 78.8451 0.63,236 4.1173 0.2Camwood Acres Percent 7,919 5.07,007 0.114,808 9,4255 34,053,952 34,213,948 8.897,929 62.190 0.323,036 304 90.2304 34.6	Ed	8,953	i t	7,139	6,933	1,932	32,002	13,347	70,306	45	7,318	1,002	39,287	117,958
Canwood Acres 7,919 40 7,007 14,808 255 53,952 13,948 97,929 90 23,036 304 Percent 5.0 0.1 4.4 9.4 0.2 34.2 8.8 62.1 0.1 14.6 0.2	&a	9,989	1,281	4,522	6,755	283	34,368	5,409	62,607	451	3,236	173	12,948	79,415
	Ca	7,919	40	7,007	14,808	255	53,952	13,948	97,929	90	23,036	304	36,339	157,698

TABLE 2.7 LAND USE OF FARM ACREAGE BY DELIVERY POINT, 1970-71 (concluded)

Delivery Point	Wheat	t Durum	n Oats	s Barley	Rye	Summer Fallow	Forage	Subtotal	Flax	Rapeseed	Other	Uncult. Land	Total
61 Glaslyn													5
Acres Percent 62 Hafford	6,581		8,006	6 10,297 5 9.6	0.1	23,231	8,749	56,974	105	5,209	258	44,630	167,176
Acres Percent 63 Bia River	16,727		6,833	3 7,318	187	47,131	9,375	87,571	260	3,289	0.0	44,067	135,197
Acres Percent 64 Turtleford	294		3,183	3 4,158	1 1	8,745	11,440	27,820	1 1	1,298	589	22,121	51,828
Acres Percent 65 Leask	6,224	1 1	8,353	3 10,912	415	30,764	8,838	65,506	1 1	8,296	608	33,048	107,458
Acres	14,475	883	10,716	16,381	3,836	47,932	22,903	117,126	252	7,562	661	38,783	164,384
Greater Towns 66 Spiritwood Acres Percent 67 Shellbrook	7,331	1 1	9,109	21,308	159	39,239 27.8	10,643	87,789	185	5,873	325	46,914	141,086
Acres Percent 68 Meadow Lake	9,195	1 1	5,800	18,346	1,959	51,785	15,031	102,116	51	21,054	478	37,640	161,339
Acres	14,311	149	27,336	34,348	1,443	107,717	41,135	226,439	337	60,212	4,275	147,807	439,070
cities 69 North Battleford Acres Percent	rd 5,987 6.3	1,139	3,339	5,660	519	37,683 39.4	4,002	58,329 61.0	1,017	16,658	738	18,856	95,598
Study Area Total Acres Percent	252,435	9,052	226,741	351,335	23,238	1,251,191	329,243	2,443,235	12,235	328,194	16,865	1,210,969	4,011,498
Saskatchewan Total Acres Percent	6,436,002	6,436,002 2,413,010 11.3 4.2	2,180,831	3,545,101	426,360	25,050,593	3,000,609	43,052,506	1,516,244	2,163,118	193,066 1	193,066 10,201,869 8	57,126,803

Source: Canadian Wheat Board, Winnipeg.

## Crop Yields

Detailed information on crop yields at each delivery point is shown in Table 2.8. The high, low, range and average yields of spring wheat, durum wheat, oats, barley and flaxseed are given for the period from 1962-71. In some instances, data was not available for the full ten years.

The ten-year average yields per acre for spring wheat and durum wheat in the study area were about the same: 20.7 bushels for spring wheat and 23.2 bushels for durum wheat. For the other grains, the average yields in bushels per acre were as follows: oats, 40.8; barley, 33.0 and flaxseed 14.8. In the table a great variability of yields is apparent. The range between the high and low yields for each grain is always greater than the ten-year average yield value. For example, the range of 36 bushels per acre for spring wheat is more than the ten-year average yield of 20.7 bushels, and the range of 85 bushels per acre for oats is over twice the ten-year average yield of 40.8 bushels. This relationship, of course, is not as pronounced for a particular delivery point as it is for the study area as a whole.

TABLE 2.8 TEN-YEAR AVERAGE YIELDS OF SPRING WHEAT, DURUM, OATS, BARLEY AND FLAXSEED BY DELIVERY POINT, 1962-71

	Ten-Year Average	20.0 <sup>a</sup> 25.0 <sup>a</sup>	16.0	10.3 <sup>£</sup>	18.5 <sup>d</sup> 14.6 <sup>e</sup> 15.7 <sup>c</sup>	18.3°	17.5 <sup>d</sup> 17.3 <sup>g</sup> 10.0 <sup>a</sup>	15.0 11.6 14.0	35.0 <sup>b</sup>	20.0ª	15.4 <sup>e</sup> 14.0 <sup>a</sup> 6.5 <sup>b</sup>
axseed	Range	00	10	10	15 12 8	12	10 22 0	10 10 0	01	0	300
Flax	Low R	20 25	10	9	12 8 2 1	15	10	88 20 20	30	20	10
	High	20 25	20	16	27 20 20	20	25 25 10	20 20 20 20	40	20	20 14 8
	Ten-Year Average	37.4 h 25.0 c	0 4 4	00 4 12	32.5 <sup>t</sup> 30.8 34.8 <sup>i</sup> 39.4 <sup>h</sup> 26.9 <sup>h</sup>	26.4 <sup>h</sup> 37.1	335.0 325.0 5.6	34.3 421.3 421.3 30.2 30.2	34.0 35.8 36.3 <sup>1</sup> 32.7	8	36.5 28.0 <sup>1</sup> 25.0 <sup>9</sup>
rley	Range	36	333	18 35 20	30 30 30 30	32 55 40	044 040 040 040 040	45 30 17 50 42 35 35	40 37 35 25	40	252
Bar	Low	14 20 20	20 12 20	27 10 25	15 8 5 1 0	20 22	100000	108 13000	13	10	15
	High	35 40	40 45 50	45 45	40 50 40 40	40 60 60	000 000 000 000 000 000	0 0 0 0 0 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0	50 50 40	50	32
	Ten-Year Average	38.6 50.0 40.0	000	∞ ∞ ru	36.3 <sup>‡</sup> 42.8 42.8 48.8 <sup>h</sup> 37.5 <sup>h</sup>	27.8 <sup>h</sup> 42.6	44.24 44.24 43.50	422.28 32.52 42.0 37.6 37.6	53.0 40.6 48.3 <sup>1</sup> 45.7	39.1 i	52.0; 40.0 <sup>1</sup> 34.3 <sup>9</sup>
Oats	Range	36 25 30	30 42 42	50 45 35	42 32 55 60 30	455	38 48 60 60 45	400 20 80 80 80 80 80 80 80 80 80 80 80 80 80	50 30 65 40	42	50
	Low	shels 14 40 25	20 15 30	10	201288	7 22 22	22 20 10 20 20 20 20	100 120 100 100 100 100 100 100 100 100	20 20 15 20	8 7	30
	High	- bu	50 75	900	50 50 50 50	500	040000000000000000000000000000000000000	50 50 50 50 50 50 50 50	2000	50	800
	Ten-Year Average	15.02	20.08	27.7°	19.0 <sup>f</sup> 26.1 <sup>i</sup> 15.0 <sup>a</sup>	30.0 <sup>a</sup> 29.0 <sup>c</sup>	30.5 <sup>b</sup> 30.0 <sup>c</sup>	10.5 <sup>b</sup> 20.0 <sup>d</sup> 22.3 19.3 <sup>d</sup>		17.5	30.0°
Durum	Range	0	0	25	13 32 0	23	20	19 22 18	30 0	rc	10
	Low	15	20	15	128	30	30	100 87	25 10 15	15	25
	High	ro ro	20	40	25 40 15	30	31 40	20 25 30 25	25 40 25	20	ю го
	Ten-Year Average	18.5 <sup>h</sup> 22.7 <sup>c</sup> 20.0 <sup>e</sup>	20.4 <sup>e</sup> 20.5 <sup>h</sup> 24.1 <sup>h</sup>	18.0° 19.6 <sup>1</sup>	23.2 <sup>t</sup> 23.0 25.6 <sup>t</sup> 21.3 <sup>h</sup> 17.1 <sup>h</sup>	0240	28.00 ± 18.2	25.3 17.2 26.3 20.9 18.3	21.4 20.3 21.6 <sup>1</sup> 24.6 <sup>1</sup>	21.2 <sup>i</sup>	26.8 20.3 <sup>1</sup> 18.3 <sup>9</sup>
g Wheat	Range	29	18 20 20	28 20 17	18 18 27 25 24	22 23 31 31	200 200 200 200 200	20 20 23 24 23 19	34 23 10	25	388
Spring	Low		l		122	4000	750844	120 120 7	6 7 8 20	7.25	18
	High	classify Closed Closed uth 35 30 25	30 30	28 35 35 35	30 32 30 30 30	32 40 40	300000	200 200 200 200 200 200 200 200 200 200	9888	30	40 25 25
	Delivery Point	0 0	Ormeaux Ordale Fallman	o Kilwining 10 Redberry 11 Scentgrass 12 Polwarth	13 Cater 14 Brada 15 Lilac 16 Iffley 17 Ranger		21 Crutwell 22 Cavalier 23 Keatley 24 Bapaume 25 Robinhood	27 Sandwith 28 Mildred 29 Belbutte 30 Prince 31 Richard 32 Denholm 33 Ruddell	34 Alticane 35 Glenbush 36 Fielding 37 Mont Nebo	Villages 38 Whitkow 39 Mullingar	40 Holbein 41 Parkside 42 Makwa

TABLE 2.8 TEN-YEAR AVERAGE YIELDS OF SPRING WHEAT, DURUM, OATS, BARLEY AND FLAXSEED BY DELIVERY POINT, 1962-71 (concluded)

	Ten-Year Average		10.0 <sup>a</sup> 5.0 <sup>a</sup> 17.5 <sup>b</sup>	13.8 <sup>h</sup>	13.3°	$11.3^d$ $12.5^h$	113.88 13.08 13.08 17.55 17.55 15.02	12.86	14.6 <sup>e</sup> 10.0 <sup>b</sup> 12.8 <sup>i</sup>	16.8 <sup>đ</sup>	14.5	
axseed	Range		001	12 0	10	15	88 55 7 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	72	100	12	37	
Fla	Low		15	158	10	10	100110	10	901	10	က	the
	High		10	20 15	20	15	200222	15	20 10 50	22	40	by
	Ten-Year Average		28.0, 38.9 <sup>1</sup> , 34.7 <sup>1</sup>	34.3 36.9	35.0* 29.5 39.7	38.0 37.5 33.1 <sup>h</sup>	27.3 33.9½ 34.4½ 30.6½ 35.2 44.0 31.5	32.99	38.0 37.5 26.0	35.1	33.0 <sup>j</sup>	above averages weighted
ey	Range		15	48	30 40	30	2223332030	35	25 20 25	25	52	avera
Barley	Low		30	8225	20 20	1000	4100110	20	25 25 15	20	22	above
	High		35 45 45	50	45 60 60	50 45	040 000 000 000 000 000 000 000 000	45	50 45 40	45	09	the
	Ten-Year Average	acre -	34.6, 48.3 <sup>1</sup> 56.7 <sup>1</sup>	35.5, 48.9 <sup>1</sup> , 45.6	40.6 31.0	45.5 45.5 41.3 <sup>h</sup>	443.1 441.72 441.72 443.0 443.0 440.62 440.62	40.79	44.8 43.5 40.5	47.0	40.8 <sup>j</sup>	ave
Oats	Range	per	35 45 65	40 65 60	4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	40 45	64646746 0666666666666666666666666666666	322	35 40 25	20	00	average ted as an
	Low	bushels	355	10 10 20 20	25	20 15	20 20 20 20 20 20 20 20	155	25 20 25	20	ŕο	ear ave culated
	High	nq -	50 80 75	8802	20 20 20 20 20 20 20 20 20 20 20 20 20 2	09	22 60 60 60 60 60 60 60 60	2000	2000	70	90	19-year 7calcula
	Ten-Year Average		16.7°	30.0°	25.0° 25.0° 30.0°	19.5 <sup>£</sup>	18.3 <sup>1</sup> ; 18.0 <sup>d</sup> 20.8 20.0 <sup>d</sup>	25.0 <sup>d</sup>	30.0ª	25.0°	23.2 <sup>j</sup>	average
Durum	Range		000	0 12	000	24	12 22 25 25 26 27	20	0	0	39	g7-year h8-year
DO	Low		10	25 30	20 25 25	4	10 20 20	20	30	25	_	
	High		20	30	30 35 35	28	255 30 20 20	40	30	25	40	average
	Ten-Year Average		18.1 24.5,	14.7 27.1 25.6	20.0 28.0	20.8 22.8 21.3 <sup>h</sup>	18.9 20.02 20.02 20.22 118.1 18.1 19.0	18.99	20.6 23.9 22.2	24.7	20.7	e5-year f6-year
Spring Wheat	Range		15 20 23	30 30	22 22 23	20 27 17	13 22 22 18 19 18	15	20 18 23	23	36	rage
pring	Low		10	201	9 22 6	0 0 0	12 10 10 15 15	12	10	12	4	r ave
	High L		30	20 40 40 40	30 25 40	30 35 27	25 30 30 22 32 32 32 32 32	35	323	35	40	$a_{4}^{c}$ -year average
	Delivery Point		43 Livelong 44 Vawn 45 Krydor	46 Medstead 47 Speers 48 Mayfair		52 Shell Lake 53 Rabbit Lake 54 Marcelin	55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 60 Canwood 61 Glaslyn 62 Hafford		Greater Towns 66 Spiritwood 67 Shellbrook 68 Meadow Lake	Cities 69 North Battleford	Study Area Total	al-year average b2-year average

## Protein Content of Wheat

Regulations under the new Canada Grain Act incorporate protein content into the grading system. Although other quality factors are considered by millers and bakers, they pay close attention to the protein content of wheat.

Table 2.9 shows the protein content for samples of wheat by delivery point over a ten-year period. Totals for both the study area and the province are also given. It is evident that protein content varies considerably from year to year and from delivery point to delivery point. On the whole, protein levels in Saskatchewan and in the study area were highest in 1964. The lowest average protein content occurred in 1966 for the province and in 1970 for the study area. The lowest percentage in the study area, 9.7, was recorded at Shell Lake in 1968 and at Debden in 1970. These figures were still above the provincial lows of 9.5 percent and 8.8 percent for those years. The highest level in the study area, 18.0 percent, recorded at Vawn in 1964, was below the provincial high of 19.3 percent in the same year. The majority of the readings are in the 11.0 to 15.0 percent range.

In any given year, the number of samples at a particular delivery point ranges from one to ten with most being from three to five samples. Data that were based on fewer than three samples have been omitted from the table.

TABLE 2.9 PROTEIN CONTENT OF HARD RED SPRING WHEAT BY DELIVERY POINT, 1962 TO 1971

Range Aver Range age	n.a. 13.7 12.8-15.2 Closed n.a. Closed Closed n.a. 14.1 13.0-15.6 11.5-13.4 13.5 11.5-14.9	Closed n.a. n.a. 13.8 12.4-14.4 13.8 12.4-14.4 13.8 12.4-14.4 13.8 12.4-14.4 13.8 13.8-14.2 13.8-13.9 13.8-13.9 13.8-13.9 13.8-13.9 13.8-13.9 13.8-13.9 13.8-13.9 13.8-13.9 13.8-13.9 13.8-13.9 13.8-13.9 13.8-13.8 13.9-13.8 13.9 13.8-13.8 13.9 13.8-13.8 13.8-13.8 13.9 13.8-13.8 13.9 13.9 13.9 13.9 13.9 13.9 13.9 13.9	- 12.7 10.8-14.3 - 10.7-14.2 12.9 12.0-13.6 5 11.7-13.3 13.2 2.8-13.8 - 10.0-13.9 13.8 12.1-15.3 11.5-14.4 13.9 12.5-14.9 11.5-14.4 13.9 12.5-14.9 11.9-12.2 13.4 12.1-15.7 - 1.9-12.2 13.4 12.1-15.7
Aver- age	Closed n.a. * n.a. * 12.4 12.4 Closed		13. 12. 12. 12. 12. 12. 12. 12. 12. 12. 12
969 Range	n.a. 13.3-1-5.5 n.a.	13.2-16.2 13.2-15.6 11.9-14.3 12.5-15.8 10.8-15.3 12.7-16.7 13.3-14.0	13.5-15.1 12.0-13.8 n.a. 11.3-16.4 12.6-15.0 n.a.
Aver-		14.5 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14.3 13.4 14.0 13.6 12.8 12.8
968 Range	n.a. 13.0-15.5 n.a.	12.0-15.0 11.7-13.1 n.a. n.a. 13.2-16.9 13.5-16.9 13.5-16.1 14.6-15.9	12.3-14.4 12.1-15.3 12.5-15.5 11.9-15.7 11.9-15.7 1.3-17.9
Aver-	n. a. 1. 4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	11.00	13.4 13.4 14.5 14.7 14.7
967 Range	14.4-15.8 13.5-16.3 n.a. n.a. 12.3-15.8 13.5-15.1	14.4-17.1 13.1-15.6 10.9-14.0 10.9-14.0 12.8-15.0 11.9-15.3 13.9-15.3 13.9-15.3	14.5-16.8 12.1-12.8 10.7-16.5 13.3-15.4 n.a.
Aver-	Closed Closed 15.0 l 14.6 l 14.5 l 13.9 l 14.5 l 14.5 l 14.5 l	15.21 16.22 17.44 17.43 18.81 19.61 19.61	13.35 14.25 1 . a
966 Range	ed n.a. ed n.a	12.5-14.7 15.5-14.3 11.4-14.0 11.9-13.5 11.6-14.1 11.6-14.1 11.6-14.1 11.6-14.1	10.3-13.6 11.5-14.6 11.9-13.7 13.6-15.3 11.4-13.9
Aver-	Closed n.a. n.a. n.a. n.a. n.a. n.a. n.a. n.a	13.88 13.00 13.00 13.00 13.00 13.00 13.00 13.00	12.2 12.8 13.0 14.0 12.7
965 Range	n.a. 12.8-14.2 13.2-15.0 13.2-13.9 n.a. 12.5-17.5 13.4-14.8	13.2-13.5 13.2-13.5 10.0-11.7 13.6-12.4 12.0-12.4 13.8-15.7 12.8-15.7 12.8-15.7	14.0-16.4 12.3-13.7 13.0-15.0 n.a. 12.6-13.0 13.0-15.0
Aver-	13.4 1 13.6 1 14.1 1 1 14.1 1 1 1	1 8 1 4 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	14.8 112.9 112.9 14.4 14.4
964 Range	n.a. n.a. 13.4-14.8 13.7-15.3 14.3-15.7 14.3-15.7 14.8-17.1	15.3-17.4 n.a. n.a. 13.2-15.4 15.8-17.3	14.2-15.9 n.a. 13.8-18.0 14.4-15.6
Aver-	Closed ************************************	16.0 n.a. n.a. 17.1 17.1	15.3 16.0 15.2 16.0
1963 Range	14.8-16.8 11.8-16.8 11.8-15.4 11.3-16.8 13.1-16.5 13.1-16.5	11.6-16.8 15.1-17.5 n.a. n.a. 12.5-14.9 12.9-16.9 13.0-16.7 13.0-16.7 13.0-15.7	12.8-14.1 13.5-15.5 13.1-16.1 14.0-16.5 12.9-16.9
Aver-		11.00 n n n n 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13.9 14.2 14.2 16.0 15.0 15.0
962 Range	n.a. n.a. 13.6-13.9 13.9-15.4 n.a. n.a.	14.8-16.9 13.5-14.6 11.8-15.0 11.8-15.0 11.8-15.0 11.7-15.6 13.5-16.3 15.6-16.7 14.7-17.0	12.5-14.9 12.8-15.2 12.8-15.2 14.8-16.5 12.5-16.5
Aver-	13.88 13.88 13.88 13.88 13.88 13.88 13.88 13.88 14.7 1 14.6	113.00.01.01.01.01.01.01.01.01.01.01.01.01.	13.8 14.0 14.0 15.7 15.7 15.2
Delivery Point	Too Small to Classify   Hartwell     Hartwell     Cameo     Bournemouth     Diwich     Cleeves     Cleeves     Cleeves     Cleeves     Corneaux     Tordale     Tallman     Rillmining     Rillmining     Rechery     Scentgrass     Polwarth     Cater     Banda     Lilac     Lilac     Tiles     Ranger     Range	Hamlets 18 Hatherleigh 19 Redfield 20 Hamlin 22 Gavalier 23 Keatley 24 Bapaume 25 Robinhood 26 Fairholme 25 Robinhood 35 And ith 28 Mildred 29 Belbutte 30 Prince 31 Richard 32 Demholm 33 Ruddell 34 Alticane 35 Glenbush 35 Fielding 37 Mont Nebo	Villages 38 Whitkow 39 Wullingar 40 Holbein 41 Parkside 42 Makwa 43 Livelong 44 Vawn 45 Krydor 46 Medstea 47 Speers 48 Mayfair 49 Maymort 49 Maymort

See footnotes at end of table

TABLE 2.9 PROTEIN CONTENT OF HARD RED SPRING WHEAT BY DELIVERY POINT, 1962 TO 1971 (concluded)

Range	12.0-14.2	11.2-12.9 12.8-15.0 10.1-13.7 12.6-15.5 11.4-14.3	11.1-14.7	13.2-15.5	10.1-15.8	9.7-19.0
Aver-	13.3 12.0-14.	12.2 1. 13.3 1. 13.3 1. 14.0 1. 13.3 1. 13.3 1. 13.2 1	13.2	14.3	13.3	13.7
970 Range	11.3-12.5	9.7-11.6 12.4-14.6 11.2-14.3 11.7-12.9 10.3-14.3 11.5-13.0 11.5-13.0 11.3-15.6 10.9-15.2	10.7-14.3	1	9.7-15.6	8.8-16.8
Aver- age	11.9	10.8 13.2 12.2 12.0 12.8 12.8 12.5 12.5	12.5	ı	12.4	13.4
Range	12.2-15.6	13.3-14.9 11.6-14.9 12.4-16.9 11.9-14.3 11.4-17.1 12.6-15.3	12.9-14.1 13.4-15.5 11.7-15.6	11.6-14.7	10.8-17.1	9.1-19.3
Aver-	14.0	14.7	13.3	13.8	14.0	14.0
968 Range	9.7-11.5 n.a. 11.7-16.9	10.7-13.6 13.4-15.1 12.9-14.1 12.9-14.5 13.0-15.7 11.2-13.6	11.1-13.0	13.6-16.3	9.7-16.9	9.5-19.7
Aver- age	10.6 n.a.	12.2 14.2 13.6 15.1 12.3 12.3	13.0	15.1	13.2	14.2
Range	14.0-14.8 12.8-14.9 12.9-15.7	11.6-14.2 11.1-6-14.3 11.8-14.7 12.6-17.3 12.6-17.3 12.5-14.7 11.2-14.8 11.2-14.8	12.0-13.1 10.9-14.9 10.4-14.2	n.a.	10.4-17.3	9.0-19.1
Aver-	14.4	7.22 1.25.6 1.35.7 1.35.0 1.3.0 4.4	12.7	n.a.	13.9	14.1
r- Range	13.2-15.8	10.0-13.1 11.2-14.1 	10.6-12.1	10.9-15.0	10.0-17.3	9.5-17.7
Aver- age	13.9	11.4	11.5	13.0	12.8	13.3
965 Range	11.4-14.1	11.2-13.3 13.0-16.7 13.1-16.5 13.3-15.0 11.3-14.6 12.3-14.0 n.a.	13.1-13.9 12.9-15.6 11.8-16.0	12.7-17.0	10.0-17.9	9.5-18.9
Aver-	12.3	12.4 15.2 14.6 13.7 13.7 13.1 14.1	13.4	14.1	13.8	13.7
1964 Range	13,8-16,3	15.2-15.9 16.6-16.7 - - 14.4-16.3 14.7-15.9	15.1-16.7 14.6-17.3 11.8-15.7	ı	11.8-18.0	10.4-19.3
Aver-	15.2	11.5.5.1 1.1.5.8.1 1.1.5.8.2.2.2.2.2.2.3.1	15.9		15.6	15.3
1963 Range	12.0-14.9 n.a. 10.0-13.5 11.0-15.3	12.8-15.8 13.4-16.3 11.6-13.3 12.3-15.3 13.2-17.5	11.4-13.4	15.3 14.3-16.8	14.2 10.0-17.5	8.5-19.2
Aver- age	13.2 n.a. 12.3	14.3 14.4 14.8 12.2 13.7 13.7	12.6	15.3	14.2	14.6
1962 Range	13.4-15.7 10.9-14.9 12.3-13.6 12.8-15.3	13.5-14.0 13.5-14.3 13.0-14.4 12.24-15.5 12.5-15.6 13.4-15.6	13.0-14.7 10.0-14.4 11.0-13.9	15.3 15.2-15.4	14.2 10.0-17.0	8.6-18.6
Aver-	14.3 13.2 14.3	12.8 13.9 14.2 14.6	13.8	15.3	14.2	14.2
Delivery Point	51 Meota 52 Shell Lake 53 Rabbit Lake 54 Marcelin	Towns 55 Debden 56 Leoville 57 Borden 58 Edm 59 Radisson 60 Camwood 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford 65 Leask	Greater Towns 66 Spiritwood 67 Shellbrook 68 Meadow Lake	Cities 69 North Battleford	Total Study Area <sup>a</sup>	Saskatchewan Total 14.2 8.6-18.6

\* Storage only

- Indicates data were based on fewer than three samples.

n.a. - Not available

<sup>a</sup>Averages weighted by number of samples.

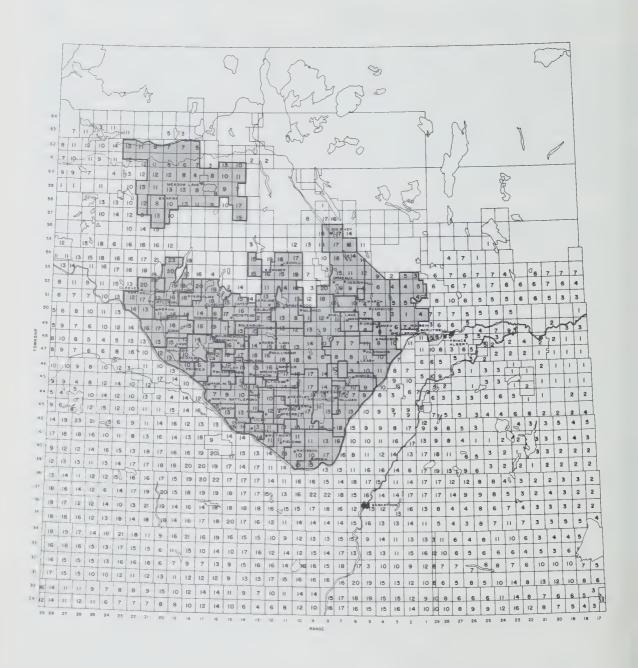
Source: Grain Research Laboratory, Canadian Grain Commission, Winnipeg.

## Prairie Farm Assistance Act Payments

The Prairie Farm Assistance Administration (PFAA) was set up under an Act of Parliament in 1939 to provide limited crop insurance for grain farmers. At present, the program is gradually being phased out in favour of other forms of crop insurance administered by the provinces. Although a one-percent levy on all grain sold by Prairie farmers without other crop insurance has not been collected since August 1, 1971, payments under the program have continued to farmers in areas not covered by crop insurance. In 1973, a portion of Alberta was the only area where other crop insurance was not yet available.

The map in Figure 2.5 gives a rough outline of the land tributary to each delivery point in the study area. It shows the number of times during the past 32 years that PFAA payments for crop failure were made to farmers. In explanation of the figures appearing in each township, the number "12", for example, does not mean that all farmers received payments in 12 of the 32 years; rather it means that some payments were made in the township in 12 of the 32 years. The map thus indicates the frequency of crop failure in all parts of the region.

PFAA payments were made to all townships in the hinterlands of the delivery points. There was, however, considerable variation in the number of payments: farmers in a township north of Holbein received only one payment, while farmers in a township north of Livelong received as many as 23 payments.



PRAIRIE FARM ASSISTANCE ACT PAYMENTS 1939-1970

## Farm Size and Land Tenure

The distribution of grain farm sizes in the Shellbrook-Turtleford region is shown in Table 2.10. Class sizes are ordered in intervals of 160 acres so that 160 or one of its multiples falls at the midpoint of each class size. More detailed statistics of farm sizes, grouped by delivery point, are given in Table 2.11 for the crop years 1962-63 and 1969-70.

The number of farms in this context is actually the number of grain delivery permits, and farm sizes are derived from the acreages recorded in each permit book. To the extent that individual farm operational units are, in some instances, associated with more than one delivery permit, farm numbers are overstated while farm sizes are understated. With this in mind, the total number of farms decreased by 1,288 farms or 16.2 percent. In both 1962-63 and in 1969-70 the greatest number of farms fell into the 241-400 acre size group, 27.2 percent and 20.9 percent respectively. The mode, that size of farm occurring most frequently in the study area, was 320 acres in both years (see footnotes to Table 2.11). In each year, Table 2.10 shows there is a greater concentration of farms at the lower end of the size groups than at the upper end, resulting in a skewed distribution.

The mean farm size for the study area (Table 2.11) increased from 494 acres to 605 acres or about 22 percent. The mean increased at every delivery point except Polwarth.

The median farm size in the study area increased from 470 acres to 480 acres. This means that in 1962-63 about half the total number of farms had less than 470 acres. Of course, there were some farms with exactly 470 acres. In 1969-70 this half-way point rose to 480 acres. Considering that the median as well as the mean increased, it can be concluded that the number of large farms increased relative to the number of small farms.

The general trend with respect to land tenure has been towards a substantially greater percentage of land being owned rather than being rented by farm operators (Table 2.12). For the total study area, the percentage of owned land increased from 73.5 percent in 1962-63 to 80.3 percent in 1969-70. In 1969-70 the percentages of owned land ranged from 68.7 percent at Holbein to 90.9 percent at Mildred.

TABLE 2.10 DISTRIBUTION OF FARM SIZES IN THE STUDY AREA, CROP YEARS 1962-63 AND 1969-70

	19	62-63	19	69-70
Size Groups (acres)	Number of Farms		Number of Farms	
1 - 240 241 - 400 401 - 560 561 - 720 721 - 880 881 - 1,040 1,041 - 1,200 1,201 - 1,360 1,361 - 1,520 1,521 - 1,680 1,681 - 1,840 1,841 - 2,000 2,001 - 2,160 2,161 - 2,320 2,321 - 2,480 2,481 - 2,640 2,641 - 2,800 2,801 - 2,960 2,961 - 3,120 3,121 - 3,280 3,281 - 3,440 3,441 and over	1,615 2,159 1,664 1,096 590 337 197 119 51 32 24 18 11 5 3 5 1 1 1 1	20.35 27.21 20.97 13.81 7.44 4.25 2.48 1.50 0.64 0.40 0.30 0.23 0.14 0.06 0.01 0.01 0.01 0.01 0.01 0.04 0.04	1,104 1,388 1,216 994 649 457 292 185 119 75 48 31 25 16 8 7 10 4 4 4	16.61 20.88 18.29 14.95 9.76 6.87 4.39 2.78 1.79 1.13 0.72 0.47 0.38 0.24 0.12 0.11 0.15 0.06 0.06 0.06 0.06
Study Area Total	7,936	100.00	6,648	100.00

TABLE 2.11 AVERAGE ACREAGE OF FARMS IN THE STUDY AREA, 1962-63 AND 1969-70

Delivery Point	No. of Farms	Mean Size	Maximum Size	Minimum Size	Median Size	Modal Size Group(s)
			- ac	res -		
Too Small to Clas   Hartwell	sify					
1962-63 1969-70	Storage o Closed	nly				
2 Cameo 1962-63 1969-70	Storage o	nly				
3 Bournemouth 1962-63 1969-70	22 24	480 546	1,120 1,280	160 160	429 474	241-400 401-560
4 Dulwich 1962-63 1969-70	30 Closed	609	1,920	160	480	241-400
5 Cleeves 1962-63 1969-70	41 Closed	540	1,151	149	480	401-560
6 Ormeaux 1962-63 1969-70	43 Closed	505	1,364	72	460	241-400
7 Ordale 1962-63 1969-70	58 32	451 500	1,274 1,231	80 158	320 480	241-400 241-400
8 Tallman 1962-63 1969-70	91 51	426 460	1,760 1,250	50 150	403 352	401-560 1-240
9 Kilwinning 1962-63 1969-70	Storage o	nly				
10 Redberry 1962-63 1969-70	27 Storage o	310 nl <i>y</i>	640	80	320	1-240, 241-400
11 Scentgrass 1962-63 1969-70	51 45	478 639	1,760 2,060	160 148	320 516	241-400 241-400
12 Polwarth 1962-63 1969-70	30 29	467 430	1,562 1,152	35 20	323 328	241-400 1-240

TABLE 2.11 AVERAGE ACREAGE OF FARMS IN THE STUDY AREA, 1962-63 AND 1969-70 (continued)

Delivery Point	No. of Farms	Mean Size	Maximum Size	Minimum Size	Median Size	Modal Size Group(s)
			- ac	res -		
13 Cater 1962-63 1969-70	36 Storage o	412 nly	1,120	104	320	1-240, 241-400
14 Brada						
1962-63 1969-70	47 37	550 741	1,421 1,543	129 240	480 640	241-400 561-720
15 Lilac						
1962-63 1969-70	61 52	574 614	1,600 1,440	160 160	480 480	401-560 241-400, 561-720
16 Iffley						501-720
1962-63 1969-70	75 36	545 579	3,200 2,947	148 160	480 480	241-400 241-400
17 Ranger						
1962-63 1969-70	54 27	400 516	1,778 1,773	109 160	320 320	241-400 241-400
Hamlets						
18 Hatherleigh 1962-63	30	475	960	140	470	043 400
1969-70	34	574	1,760	149 158	470 480	241-400 241-400
19 Redfield						
1962-63 1969-70	43 38	606 746	2,156	160	480	241-400
	50	740	2,796	160	640	561-720
20 Hamlin 1962-63	91	507	1 500	7.00		
1969-70	87	636	1,520 2,320	160 158	460 480	241-400 241-400
21 Crutwell						
1962-63 1969-70	51 Storage or	378 nly	1,920	80	320	1-240
22 Cavalier						
1962-63	67	703	2,282	118	570	241-400
1969-70	66	741	3,200	118	636	1-240, 241-400
23 Keatley						
1962-63 1969-70	80 68	475 592	1,280 1,320	160	480	241-400
		332	1,320	37	637	241-400
24 Bapaume 1962-63	60	566	1,760	00	400	041
1969-70	81	680	2,000	80 80	480 640	241-400 241-400

TABLE 2.11 AVERAGE ACREAGE OF FARMS IN THE STUDY AREA, 1962-63 AND 1969-70 (continued)

Delivery Point	No. of Farms	Mean Size	Maximum Size	Minimum Size	Median Size	Modal Size Group(s)
			- acr	es -		
25 Robinhood 1962-63 1969-70	73 54	560 749	1,600 2,080	45 160	480 767	1-240 241-400 721-880, 881-1,040
26 Fairholme 1962-63 1969-70	59 50	479 725	1,160 2,240	150 160	480 640	1-240 241-400
27 Sandwith 1962-63 1969-70	35 41	535 608	1,280 1,440	155 27	580 628	561-720 1-240, 241-400, 561-720
28 Mildred 1962-63 1969-70	78 40	508 697	1,920 2,055	160 149	445 634	241-400 561-720
29 Belbutte 1962-63 1969-70	54 Storage o	550 nly	1,879	. 13	480	241-400
30 Prince 1962-63 1969-70	96 99	505 667	2,440 3,396	40 143	394 480	241-400 401-560
31 Richard 1962-63 1969-70	115 93	512 618	1,281 1,927	138 138	480 480	241-400 401-560
32 Denholm 1962-63 1969-70	85 90	600 694	2,080 2,400	125 125	480 640	241-400 241-400, 561-720
33 Ruddell 1962-63 1969-70	43 35	529 660	1,280 1,360	160 35	480 630	401-560 561-720
34 Alticane 1962-63 1969-70	105 54	418 539	2,080 1,120	63 63	320 480	241-400 241-400
35 Glenbush 1962-63 1969-70	74 48	507 698	1,280 2,080	100 159	480 637	241-400 561-720
36 Fielding 1962-63 1969-70	63 53	664 <b>7</b> 37	2,560 2,720	35 12	<b>4</b> 80 535	401-560 401-560

TABLE 2.11 AVERAGE ACREAGE OF FARMS IN THE STUDY AREA, 1962-63 AND 1969-70 (continued)

Delivery Point	No. of Farms	Mean Size	Maximum Size	Minimum Size	Median Size	Modal Size Group(s)
			- acr	'es <b>-</b>		
37 Mont Nebo 1962-63 1969-70	74 40	511 719	3,287 2,337	55 51	465 607	401-560 401-560
Villages						
38 Whitkow 1962-63 1969-70	150 61	479 565	1,878 1,878	128 155	469 472	241-400 241-400
39 Mullingar 1962-63	92	506	1,760	158	480	241-400,
1969-70	49	619	1,561	160	480	401 - 560 241 - 400
40 Holbein						
1962-63 1969-70	216 192	418 641	2,561 4,960	19 35	320 480	1-240 241-400
41 Parkside 1962-63 1969-70	128 109	504 537	1,755 1,521	40 40	450 480	241-400 241-400
42 Makwa	7.04	406	1 700			
1962-63 1969-70	124 104	426 551	1,760 1,440	120 158	320 480	1-240 401-560
43 Livelong						
1962-63 1969-70	101 84	634 765	2,560 2,720	80 73	512 640	1-240, 561-72 241-400, 561-720
44 Vawn 1962-63	90	662	1,708	108	480	401-560
1969-70	86	813	8,990	128	640	1-240
45 Krydor 1962-63	208	357	1,145	140	320	241-400
1969-70	185	405	1,227	34	320	1-240
46 Medstead 1962-63	94	541	1,526	113	. // 00	401-560
1969-70	117	660	3,040	160	480 520	401-560
47 Speers 1962-63	89	568	2 040	1.00	400	047 400
1969-70	87	601	3,040 2,240	160 10	480 480	241-400 241-400
48 Mayfair 1962-63	0.4	F 43	0.000			
1962-63	94 89	541 626	2,080 3,040	160 102	480 480	241-400 241-400

TABLE 2.11 AVERAGE ACREAGE OF FARMS IN THE STUDY AREA, 1962-63 AND 1969-70 (continued)

Delivery Point	No. of Farms	Mean Size	Maximum Size	Minimum Size	Median Size	Modal Size Group(s)
			- acr	es -		
49 Maymont 1962-63 1969-70	93 86	542 616	1,440 1,546	148 19	480 480	241-400 401-560
50 Mervin 1962-63 1969-70	96 79	668 814	1,688 2,720	158 80	640 720	401-560 561-720
51 Meota 1962-63 1969-70	53 36	559 751	2,096 5,596	9	480 480	241-400 241-400
52 Shell Lake 1962-63 1969-70	204 176	475 564	1,440 2,560	159 154	480 480	401-560 241-400
53 Rabbit Lake 1962-63 1969-70	116 147	462 578	1,120 2,075	150 85	480 481	241-400 241-400
54 Marcelin 1962-63 1969-70	164 137	473 582	2,394 3,378	95 130	435 480	241-400 241-400
owns 55 Debden 1962-63 1969-70	199 203	461 649	1,720 3,560	75 80	458 577	401-560 561-720
56 Leoville 1962-63 1969-70	155 134	507 634	2,290 3,424	2 16	449 630	241 -400 1 -240
57 Borden 1962-63 1969-70	220 189	504 581	1,920 1,920	<b>4</b> 0 47	480 480	401-560 241-400
58 Edam 1962-63 1969-70	120 144	773 808	4,074 3,200	160	710 640	721-880 401-560
59 Radisson 1962-63 1969-70	143 132	546 601	1,750 1,920	159 140	480 480	561-720 401-560
60 Canwood 1962-63 1969-70	285 276	463 547	1,600 2,819	20 25	442 480	241-400 241-400

TABLE 2.11 AVERAGE ACREAGE OF FARMS IN THE STUDY AREA, 1962-63 AND 1969-70 (concluded)

Delivery Point	No. of Farms	Mean Size	Maximum Size	Minimum Size	Median Size	Modal Size Group(s)
Derivery Torrio	7 0 7 1110		- acr			
61 Glaslyn 1962-63 1969-70	197 163	529 619	2,720 2,056	160 148	480 480	241-400 241-400
62 Hafford 1962-63 1969-70	329 302	391 471	1,200 1,921	53 80	320 412	241-400 241-400
63 Big River 1962-63 1969-70	110 110	360 481	954 1,600	118 119	320 474	241-400 241-400
64 Turtleford 1962-63 1969-70	119 141	616 764	3,340 3,040	37 158	490 640	401 - 560 561 - 720
65 Leask 1962-63 1969-70	300 236	504 681	6,220 9,733	28 70	412 551	241-400 241-400
Greater Towns 66 Spiritwood 1962-63 1969-70	237 234	472 623	3,360 4,160	84 29	460 480	241-400 401-560
67 Shellbrook 1962-63 1969-70	303 260	514 581	2,240 2,720	<b>60</b> 8	480 480	241-400 401-560
68 Meadow Lake 1962-63 1969-70	930 749	433 546	10,880 7,920	70 80	320 480	1-240 1-240
Cities 69 North Battlef 1962-63 1969-70	ford 135 147	536 643	2,080 2,814	123 45	480 480	241-400 1-240
Total Study Area 1962-63 1969-70	7,936 6,648	494 <sup>a</sup> 605 <sup>a</sup>	10,880 9,733	2 8	470 480	241-400 <sup>b</sup> 241-400 <sup>b</sup>

<sup>&</sup>lt;sup>a</sup>The standard deviation for the total study area in 1962-63 was 355 acres and in 1969-70 was 469 acres. The modal size for the total study area in both crop years was 320 acres.

TABLE 2.12 LAND TENURE OF FARMS IN THE STUDY AREA, 1962-63 AND 1969-70

Delivery Point	Percen 1962-63	t Owned 1969-70	Percent 1962-63	Rented 1969-70
Too Small to Classify  1 Hartwell 2 Cameo 3 Bournemouth 4 Dulwich 5 Cleeves 6 Ormeaux 7 Ordale 8 Tallman 9 Kilwinning 10 Redberry 11 Scentgrass 12 Polwarth 13 Cater 14 Brada 15 Lilac 16 Iffley 17 Ranger	* 70.9 76.4 64.9 81.0 75.4 82.1 * 84.1 67.3 67.3 67.3 72.1 78.3 79.5 67.7	Closed Closed 84.2 Closed Closed Closed 84.8 84.9 Closed * 79.3 88.6 * 80.1 84.9 82.2 87.2	* 29.1 23.6 35.1 19.0 24.6 17.9 * 15.9 32.7 32.7 32.7 27.9 21.7 20.5 32.3	Closed Closed 15.8 Closed Closed Closed 15.2 15.1 Closed * 20.7 11.4 * 19.9 15.1 17.8 12.8
Hamlets 18 Hatherleigh 19 Redfield 20 Hamlin 21 Crutwell 22 Cavalier 23 Keatley 24 Bapaume 25 Robinhood 26 Fairholme 27 Sandwith 28 Mildred 29 Belbutte 30 Prince 31 Richard 32 Denholm 33 Ruddell 34 Alticane 35 Glenbush 36 Fielding 37 Mont Nebo 38 Whitkow 39 Mullingar	75.6 79.6 79.6 70.3 80.4 72.3 68.6 51.6 68.9 71.0 66.8 62.4 81.0 86.0 67.7 77.3 71.3 80.6 78.3 75.0 84.1 74.2	88.2 83.1 81.8 * 87.4 76.9 75.0 69.3 82.5 74.5 90.9 * 82.2 87.5 74.6 84.8 75.2 83.8 84.9 69.1 89.2 82.9	24.4 20.4 29.7 19.6 27.7 31.4 48.4 31.1 29.0 33.2 37.6 19.0 14.0 32.3 22.7 28.7 19.4 21.7 25.0 15.9 25.8	11.8 16.9 18.2 * 12.6 23.1 25.0 30.7 17.5 25.5 9.1 * 17.8 12.5 25.4 15.2 24.8 16.2 15.1 30.9 10.8 17.1

See footnotes at end of table

TABLE 2.12 LAND TENURE OF FARMS IN THE STUDY AREA, 1962-63 AND 1969-70 (concluded)

Delivery Point	Percen	t Owned	Percen	t Rented
	1962-63	1969-70	1962-63	1969-70
40 Holbein 41 Parkside 42 Makwa 43 Livelong 44 Vawn 45 Krydor 46 Medstead 47 Speers 48 Mayfair 49 Maymont 50 Mervin 51 Meota 52 Shell Lake 53 Rabbit Lake 54 Marcelin	68.7	68.7	31.3	31.3
	67.4	78.2	32.6	21.8
	72.2	82.7	27.8	17.3
	79.5	79.6	20.5	20.4
	69.4	86.6	30.6	13.4
	76.4	81.6	23.6	18.4
	69.0	75.8	31.0	24.2
	81.5	82.4	18.5	17.6
	69.5	74.2	30.5	25.8
	73.7	81.0	26.3	19.0
	74.9	81.1	25.1	18.9
	83.6	84.7	16.4	15.3
	70.5	77.7	29.5	22.3
	69.4	85.5	30.6	14.5
	74.1	75.3	25.9	24.7
Towns 55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 60 Canwood 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford 65 Leask	76.1 80.4 76.5 75.0 74.0 73.0 67.0 75.3 65.7 81.9 75.8	79.9 83.5 88.5 82.8 79.2 78.8 74.8 79.5 74.8	23.9 19.6 23.5 25.0 26.0 27.0 33.0 24.7 34.3 18.1 24.2	20.1 16.5 11.5 17.2 20.8 21.2 25.2 20.5 25.2 16.0 20.1
Greater Towns 66 Spiritwood 67 Shellbrook 68 Meadow Lake	70.2	79.3	29.8	20.7
	72.6	77.7	27.4	22.3
	69.0	81.4	31.0	18.6
Cities 69 North Battleford Study Area Total	74.5 73.5	76.2 80.3	25.5 26.5	23.8

<sup>\*</sup>Storage only.

#### PART III

# GRAIN MARKETING AND HANDLING CHARACTERISTICS

# Producers' Choice of Alternate Delivery Points

When the Canadian Wheat Board changed its delivery regulations in 1970-71, farmers were permitted to specify a second delivery point for Board grains; i.e., each producer could haul his grain to either of two delivery points. An examination of the individual choices that farmers have made throws light on some of the factors that they consider when weighing the advantages and disadvantages of different delivery points.

Table 3.1 is a partial breakdown of the choices made by the 6,339 farmers who deliver grain to points in the Shellbrook-Turtleford study area. Although it is not easy to analyze the data for such things as best road approach, loyalty to a particular grain handling company, and the availability of particular shopping or service facilities, the following observations may, however, be made:

- Farmers who hauled to smaller communities were more inclined to name an alternate point than those who hauled to larger communities.
- 2. Over 78 percent of the farmers who chose an alternate point chose the next nearest elevator.
- 3. About 21 percent of the farmers named a larger center as an alternate point.
- 4. Almost 36 percent of the farmers who chose an alternate point chose one located in a different loading block.

PRODUCERS' CHOICE OF ALTERNATE DELIVERY POINTS, 1970-71 TABLE 3.1

		Parcent of	Number of	Alternate (	Chosen	Load	ing Block	Chosen
Delivery Point	Number of Farmers	ers osin erna	in	Nearest	Ce	Same	Different	Double <sup>b</sup>
				ı percer	nt of farmer	rs choosi	ng alterna	te -
2 Cameo	Closed							
	Closed							
	Closed							
	Closed							
	Closed		C	0 80	03	0 80	0	0.0
O Viliania	50	0.7			•	9		
	Closed for	ctorac						
		200	45	ý				0.0
10 Dolwowth		0.01	2 0	100.0	0	100.0	0.0	0.0
J 0	7] 250d for	·	2	•	) •	) )		
2 <	ゴ	3 LUI AY	35	LC	C	4	5	
+ 14	000	0.0	67	10	4	2	4.	0.0
	47	0.0	41	90.2	24.4	41.5	58.5	
_	Closed							
Hamlets	Closed for	40						
0 0		2 2	29	2	13.8	6.9	93.1	0.0
O Hamlin	86	0.0	98	98.8	4.		5	
	Closed for	stor	Ç	,	c			
22 Cavalier	65 0	2.3	9 G	91.3		11.6	88.	0.0
	000	0.[0	17	0.00	29.4	29.4	0	
25 Robinhood	5.0	- 00	46	00.00	4.3	26.		
	68	0.0	39	97.4	0.0	100.0	0	
	44	52.3	21	71.4	4.8	.99		
	39	20.5	31	100.0	87.1	100.0		

TABLE 3.1 PRODUCERS' CHOICE OF ALTERNATE DELIVERY POINTS, 1970-71 (continued)

	-	Percent of	Number of	Alternate	Chosen	Los	oading Block C	Chosen
Delivery Point	Number of Farmers	rarmers Not Choosing Alternate	rarmers Choosing Alternate	Next Nearest Point	Larger Center <sup>a</sup>	Same	Different	Double
				- percent	nt of farmers	choos	ing alternate	
29 Belbutte	Closed for	for storage						
30 Prince	66	22.2	77	84.4		7		
	06	7	74		4.	5		
	82	Ċ.	99		9	i.		
	35	11.4	31	54.8	35.5	54.8	45.2	0.0
	52	4.	∞ ;	0	2			
	46	· ·	14.			· 0		
$^{\circ}$	52	ص	5-		· Ω	4.		
37 Mont Nebo	95 95 95	Ω.	59			-		
Villages								
38 Whitkow	9/	0.0	9/	57.9	42.1	5		
	43	0	$\sim$	82.1	2.6	94.		
	183	10.9	163	98.2	8.06	100.0	0.0	0.0
	94	4.3	06	7.96	75.6	00	a	
	pa	-						
	9/	26.3	26	66.1	0.0	Ö		
	84	ന	63	9		က်		
	181		92	/		ω.	4.	
	11		9/	$\circ$		5	4.	
47 Speers	87	<-	84	$\infty$		6	- 6	
	84	$\alpha$	89	4		4	5	
	82	C 3	82	$\infty$		ė,		
	78	21.8	61	3		Ċ.		
51 Meota	36	0.0	36	4		/		
52 Shell Lake	164	$\circ$	99	9	5.	0	0	
53 Rabbit Lake	163	43.6	92	$\infty$	13.0	44.6	55.4	0.0
54 Marcelin	133	0	82	$\infty$	3	â		
			-					

See footnotes at end of table

PRODUCERS' CHOICE OF ALTERNATE DELIVERY POINTS, 1970-71 (concluded) TABLE 3.1

		ercent o	Number of	Alternate	Chosen	Lo	oading Block	Chosen
Delivery Point	Number of Farmers	Farmers Not Choosing Alternate	~ · L W	Next Nearest Point	Larger Center <sup>a</sup>	Same	Different	Double <sup>b</sup>
				- perc	cent of farmer	ers choosing	alterna	١
Towns	100	30 3	136	21.3			80	4.1
	107	02°30		89.4			0	1.2
	7 0 0 0 0	- 240.	93	44.4	46.0	52.4	47.6	46.0
	13.7	39.4	. cc	85.5	-			1.2
	128	20.3	102	85.3			10.8	φ. Φ.
	272	29.0	193	69.4	5		6	2.6
	168	32.1	114	84.2	5		14.0	0
62 Hafford	286	49.3	145	55.2			$\dot{\circ}$	16.6
	113	84.1	00	100.0			0.0	0.0
	136	26.5	100	75.0			0.9	3.0
65 Leask	237	36.3	151	74.8	0		18.5	0.0
Greater Towns	223	لر	35	2	12.5	$\sim$	46.9	
67 Shellbrook	282	56.4	123	87.8	80.0	95.9		0.8
	738	6	226	_	٦.٦	0.0	100.0	
Cities	717	0 30	110	27	0.0	14.5	85.5	0.0
69 North Battletord	14/	ò	-	•	•			
							1 1	(
Study Area Total	6,339	38.0	3,932	78.4	21.2	64.3	35./	٠. -

 $^a$ Included are North Battleford, Battleford, Saskatoon, Prince Albert, Spiritwood, Shellbrook, Blaine Lake band Meadow Lake.  $^b$ Saskatoon is in two loading blocks.

## Delivery Permit Books Issued

Table 3.2 shows that the number of permit books issued in the study area decreased by 1,823, 22.9 percent, between 1962-63 and 1971-72. Only eight points had an increase. Bapaume made the greatest advance in relative terms as the number of permit holders grew from 60 to 90, a gain of 50.0 percent. In absolute terms, the increase of 52 permits at Rabbit Lake was the greatest in the study area.

From 1962-63 to 1971-72, a number of elevators closed at hamlets and points "too small to classify" so permit books were no longer issued for those places. The highest percentages of loss for points remaining open were 60.9 at Mullingar and 58.1 at Redfield. The largest absolute losses of permit holders were 195 at Meadow Lake and 78 at Whitkow.

TABLE 3.2 DELIVERY PERMIT BOOKS ISSUED BY DELIVERY POINT, 1962-63 TO 1971-72

Delivery Point	1962-63ª	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70ª	1970-71	1971-72 <sup>b</sup>
Too Small to Classify 1 Hartwell 2 Cameo 3 Bournemouth 4 Dulwich 5 Cleeves 6 Ormeaux 7 Ordale 8 Tallman	* * 20 F F F F F F F F F F F F F F F F F F	* * 0.00448.00 * *	Closed * 20 26 31 41 83	* 2222 * 324 7937 * 4437	Closed 20 20 Closed 17 34 37	22 Closed Closed 35 69	21 38 60	24 32 51	Closed Closed 50	45
	27 * 30 33	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	* 64 83 88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Closed 32 32 32 32 13 13 45 62 43	28 4 8 1 3 4 5 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	33 37 37 11 11 55 55	* 48. 48. 44. 44. 44. 44. 44. 44. 44. 44.	8 6 2 4 8 9 6 8 8 8 8 9 9 8 8 9 9 9 9 9 9 9 9 9	45 * 45 * 31 * 49 * 41 * 41 * 41 * 41 * 41 * 41 * 4	Closed 41 32 32 Closed 34 46 46
Hamlets 18 Hatherleigh 19 Redfield 20 Hamiin 21 Crutwell 22 Cavalier 23 Keatley 24 Bapaume 25 Robinhood 26 Fairholme 27 Sandwith 28 Mildred 29 Belbutte 30 Prince 31 Richard 32 Denholm 33 Ruddell 34 Alticane 35 Glenbush 36 Fielding	30 67 73 73 75 105 75 75 75	27 888 889 644 65 102 102 103 103 65 65	29 86 86 86 87 75 75 116 83 83 83 60 60	29 27 28 28 62 59 37 37 115 115 70 70 61	30 28 84 118 55 54 42 55 50 112 818 818 65 55	37 87 87 10 10 87 87 87 87 87 87 87 87 87 87 87 87 87	441 806 806 653 809 809 809 809 809 809 809 809 809 809	34 837 877 88 88 88 81 81 89 89 89 89 89 89 89 89 89 89 89 89 89	* 86 86 86 86 87 88 88 88 88 88 88 88 88 88	Closed 18 83 Closed 62 58 50 50 Closed 40 Closed 88 88 88 85 40 40 40
Villages 38 Whitkow 39 Mullingar 40 Holbein	150 92 216	159 84 216	156 90 207	147 73 213	133 71 201	70 76 185	63 57 197	61 49 192	76 43 183	72 36 180
									(cont	(continued)

See footnotes at end of table

DELIVERY PERMIT BOOKS ISSUED BY DELIVERY POINT, 1962-63 TO 1971-72 (concluded) TABLE 3.2

41 Parkside 42 Makwa 43 Livelong 44 Vawn 45 Krydor 46 Medstead 47 Speers 48 Mayfair 49 Mavmont	00									
50 Mervin 51 Meota 52 Shell Lake 53 Rabbit Lake 54 Marcelin	209 209 209 89 89 89 116 116	125 129 101 90 95 87 88 88 88 112 157	124 1029 202 902 903 903 1099 1099	124 126 126 97 91 113 82 83 85 85 118	117 119 88 88 109 74 74 98 88 88 85 117 117	110 113 81 72 72 88 89 89 170 170	106 113 86 89 179 75 75 78 78 132 132	109 105 84 86 117 117 89 89 87 79 147	94 76 76 87 87 87 87 86 164 163	88 68 68 77 77 169 109 83 71 163 127
Towns 55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 60 Canwood 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford 65 Leask	199 155 220 120 143 229 329 110 300	224 151 216 116 144 293 304 110	214 206 206 121 121 300 105 127 293	208 144 206 121 121 183 290 99 129	200 136 143 172 278 279 105 105	217 129 139 136 277 277 161 105 132	217 119 119 141 130 275 168 297 113	203 131 131 133 164 110 110 122 37	201 189 137 272 286 113 237	195 134 138 119 265 115 139
Greater Towns 66 Spiritwood 67 Shellbrook 68 Meadow Lake	245 303 928	236 295 896	236 285 868	22 <b>6</b> 277 825	213 280 777	214 264 751	216 258 747	233 260 748	223 282 738	216 270 733
Cities 69 North Battleford Study Area Total	7,944	135	126	126	134	132	127	148	147	152

\*Storage only.

 $^{a}$ The number of permit holders shown here may not equal the corresponding totals in Tables 2.10 and 2.11 because the two sets of figures were derived independently.  $^{b}$ Permit declarations processed to Sept. 22, 1971.

# Canadian Wheat Board Initial Payments

Under the Canadian Wheat Board marketing system, producers receive an initial payment upon delivery of their grain to country elevators. Table 3.3 shows net initial payments based on prices set at the Lakehead less freight costs from delivery points and less country elevator handling charges. Initial payment levels established each year by an order-in-council of the federal cabinet are subject to change from year to year. Initial payments in 1969-70, for example, were substantially lower than in 1968-69. In 1971-72 initial payments were the same or slightly below those set two years before.

Freight rate zones have been established following a general north-south orientation and increasing by one-cent-per-hundredweight steps as one moves west from the Lakehead. Figure 3.1 shows freight rate zones in northern Saskatchewan which include the study area. According to Figure 3.1 freight rates in the Shellbrook-Turtleford region are 23 and 24 cents per hundredweight.

Since net initial payments are, of course, slightly higher in a 23 cent freight rate zone than in a 24 cent zone, it follows that a farmer who is located on or near the boundary between those two zones will consider the price differential in choosing his delivery point. For example, a farmer delivering wheat to Richard receives \$1.26 1/4 per bushel (No. 1 C.W. Red Spring Wheat, 1971-72), 1/2 of a cent more than the \$1.25 3/4 per bushel paid at nearby Speers. To the extent that differing prices influence each farmer's choice of a delivery point, the size and shape of delivery point hinterlands are correspondingly affected.

In 1971-72, for instance, the handling charge was 5 3/4 cents per bushel of wheat, durum or barley and 4 1/2 cents per bushel of oats. This statutory charge is comprised of the country elevator elevation charge plus apportion of the terminal elevator handling charge.

For a more detailed description of how the initial payment is determined, see J.W. Channon, "How Canadian Wheat is Handled", Canadian Journal of Agricultural Economics, Workshop Proceedings, 1969, p. 88.

## ERRATA

Prairie Regional Studies in Economic Geography No. 14

THE SHELLBROOK-TURTLEFORD REGION OF SASKATCHEWAN,

Economics Branch, Agriculture Canada, 1973

Please note the following corrections:

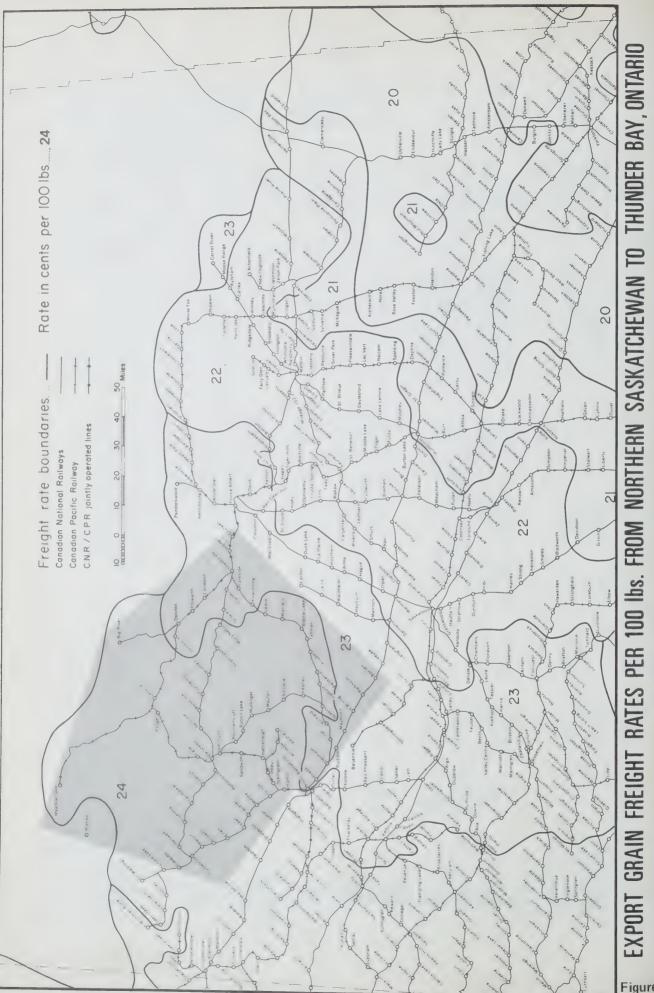
TABLE 3.3, page 121

		Durum	
Grain Freight Rates	No. 1	No. 2	No. 4
to Lakehead	C.W.A.	C.W.A.	C.W.A.
- cents/cwt	- do	llars per bushel	**
1971-72			
23	1.26 1/4	1.22 1/4	1.09 1/
24	1.25 3/4	1.21 3/4	1.08 3/
25	1.25 1/4	1.21 1/4	1.08 1/
26	1.24 1/2	1.20 1/2	1.07 1/
27	1.24	1.20	1.07
28	1.23 1/4	1.19 1/4	1.06 1/
29	1.22 3/4	1.18 3/4	1.05 3/

CANADIAN WHEAT BOARD NET INITIAL PAYMENTS TO PRODUCERS BY FREIGHT RATES, BASIS THUNDER BAY, ONTARIO<sup>a</sup> TABLE 3.3

No. 1 Feed		.80 3/8 .79 7/8 .79 1/2 .79 1/2 .78 1/2 .77 1/2	.64 1/8 .63 5/8 .62 3/4 .62 1/4 .61 1/4	.64 1/8 .63 5/8 .63 1/4 .62 3/4 .62 1/4 .61 3/4
Barley No. 3 C.W. 6 Row		.89 3/8 .88 7/8 .88 1/2 .87 1/2 .87 1/2	.74 1/8 .73 5/8 .72 3/4 .72 1/4 .71 3/4	.74 1/8 .73 5/8 .73 1/4 .72 3/4 .72 1/4 .71 3/4
No. 1 Feed	bushel –	.47 7/8 .47 1/2 .46 1/4 .46 1/2 .46 1/2 .45 7/8	.42 5/8 .42 1/4 .42 5/8 .41 5/8 .40 7/8	.42 5/8 .42 1/4 .42 1/4 .41 5/8 .40 7/8 .40 5/8
No. 2 C.W.		.52 7/8 .52 1/2 .52 1/4 .51 7/8 .51 1/2 .50 7/8	.47 5/8 .47 1/4 .46 5/8 .46 1/4 .45 7/8 .45 5/8	.47 5/8 .47 1/4 .46 5/8 .46 5/8 .45 7/8 .45 7/8
No. 4 C.W.A.	ars per	1.35 1/2 1.35 1/2 1.33 1/4 1.32 1/2 1.32 1/2	1.13 1/4 1.12 3/4 1.12 1/4 1.11 1/2 1.10 1/4	1.13 1/4 1.12 3/4 1.12 1/4 1.11 1/2 1.10 1/4 1.09 3/4
Durum No. 2 N C.W.A. C	- dol1	1.46 1/2 1.46 1/2 1.45 1/2 1.44 1/4 1.43 1/2	1.26 1/4 1.25 3/4 1.25 1/4 1.24 1/2 1.23 1/4	1.26 1/4 1.25 3/4 1.25 1/4 1.24 1/2 1.24 1/2 1.23 1/4 1.22 3/4
No. 1 C.W.A.		1.50 1/2 1.50 1/2 1.49 1/2 1.48 3/4 1.47 1/2	1.30 1/4 1.29 3/4 1.29 1/4 1.28 1/2 1.27 1/4 1.26 3/4	1.30 1/4 1.29 3/4 1.29 1/4 1.28 1/2 1.28 1/2 1.27 1/4
No. 4 Northern		1.35 1/2 1.35 1/2 1.33 3/4 1.32 1/2	1.13 1/4 1.12 3/4 1.12 1/4 1.11 1/2 1.10 1/4	ng c 1.13 1/4 1.12 3/4 1.12 1/4 1.11 1/2 1.10 1/4
Wheat No. 2 Northern		1.46 1/2 1.46 1/2 1.45 1/2 1.44 3/4 1.43 1/2 1.43 1/2	1.26 1/4 1.25 3/4 1.25 1/4 1.24 1/2 1.23 1/4	Red Spring 26 1/4 25 3/4 125 1/4 24 1/2 24 1/2 23 1/4 1.22 3/4
No. 1 Northern		1.50 1/2 1.50 1.49 1/2 1.48 3/4 1.48 1/4 1.47 1/2	1.30 1/4 1.29 3/4 1.29 1/4 1.28 1/2 1.28 1/2 1.26 3/4	No. 1 C.W
Grain Freight Rates to Lakehead <sup>b</sup>	- cents/cwt	1968-69 23 24 25 26 27 29	1969-70 23 24 25 26 27 28 29	1971-72 23 24 25 26 27 28 29

 $^{a}$ Prior to deduction of Prairie Farm Assistant Act levy of one percent. These prices are also known as "street prices".  $^{b}$ Flaxseed and rapeseed 1 1/2 cents per hundredweight higher.  $^{c}$ Effective August 1, 1971 the grades No. 1 and No. 2 Manitoba Northern were replaced by the new grade No. 1 Canadian Western Red Spring Wheat.



Source: Map "Eastbound Export Grain Rates Per 100 lbs. Based on CNR Armstrong, Fort William, Port Arthur and West Fort William, and CPR to Fort William, Port Arthur and West Fort William, and West Fort William, Port Arthur and West Fort William and William" Geographical Branch, Department of Mines and Technical Surveys, Ottawa, 1965.

Figure 3.1

# Country Elevator Facilities

The number of grain elevators and their storage capacity at a delivery point measure the importance of that particular point as a collection and distribution center.  $^{\mathcal{I}}$  Table 3.4 contains this information for each delivery point in the Shellbrook-Turtleford region in both 1962-63 and 1969-70 as well as the number of grain companies represented.

The number of elevators in the study area changed from 159 in 1962-63 to 149 in 1969-70, a decrease of 10. Storage capacity was unchanged at 37 points, increased at 13 points, and decreased at 13 points. Six elevators were closed. The net result was an increase in capacity of 141,500 bushels.

An examination of the number of grain companies located at delivery points shows that two or more companies are usually present where there are two or more elevators. This is an indication of competition by elevator firms. At each of 18 delivery points, there was 1 less company in 1969 than in 1962. No place had an increase in the number of elevator firms. In 1969, there were 26 one-company points compared with 22 in 1962.

Table 3.5 provides information on ownership, age and capacity of country elevators in the study area on August 1, 1972. Altogether, there were 54 open delivery points at which representation by the different elevator companies was as follows: Saskatchewan Wheat Pool, 52 points; National Grain Co. Ltd., 17 points; Pioneer Grain Co. Ltd., 11 points; Parrish and Heimbecker Ltd., 2 points; and United Grain Growers Ltd., 1 point.

The average age of the 131 elevators recorded in Table 3.5 was 41 years in 1972. One hundred and eight elevators, 82.4 percent, were built before 1940 and 17 elevators, 13.0 percent, were built between 1940 and 1960. Only 6 elevators, 4.6 percent, were built since 1960. The oldest elevator, built in 1906, is located at North Battleford. The average storage capacity of elevators erected before 1940 including annexes is 69,000 bushels. Elevators built in 1940 or later have an average capacity of 105,000 bushels including annexes.

<sup>&</sup>lt;sup>1</sup>Bushel receipts should also be taken into account. See Table 3.6.

TABLE 3.4 NUMBER AND CAPACITY OF LICENSED COUNTRY ELEVATORS BY DELIVERY POINT, 1962-63 AND 1969-70

	Number of Elevators 1962-63 1969-70 - number -		Storage Capacity 1962-63 1969-70 - bushels -		Number of Grain Companies	
Delivery Point					Aug. 1, 1962	Aug. 1,
					- number -	
Too Small to Class    Hartwell     Cameo     Bournemouth     Dulwich     Cleeves     Ormeaux     Ordale     Tallman     Kilwinning     Ordeberry     Scentgrass     Polwarth     Cater     Brada     Lilac     Iffley     Ranger	sify   a   a   a	Closed Closed Closed Closed Closed Closed 1 2 Closed 1 2 Closed 1 2 1 1 2 2 1	25,000 28,000 23,000 55,000 56,000 28,000 149,000 40,000 61,000 50,000 30,000 92,000 68,000 66,000 28,000	23,000 - 56,000 149,000 - 40,000 61,000 50,000 30,000 97,000 79,000 66,000 28,000	1 1 1 1 1 2 1 1 2 1 2 2 2 2	- - - - 1 1 2 1 1 2
Hamlets 18 Hatherleigh 19 Redfield 20 Hamlin 21 Crutwell 22 Cavalier 23 Keatley 24 Bapaume 25 Robinhood 26 Fairholme 27 Sandwith 28 Mildred 29 Belbutte 30 Prince 31 Richard 32 Denholm 33 Ruddell 34 Alticane 35 Glenbush 36 Fielding 37 Mont Nebo	1 2 2 2 2 2 3 2 2 2 1 1 1 2 4 2 2 2 2 2 2 2 2 2 2 2 2	1 1 2 2 <sup>a</sup> 2 2 2 2 1 1 <sup>a</sup> 2 4 2 2 2 2 2	31,000 68,000 140,000 93,000 157,000 171,000 70,700 88,000 56,000 61,000 30,000 152,000 209,000 173,000 76,700 97,100 111,000 79,000 143,000	31,000 37,000 132,000 73,000 157,000 171,000 70,700 88,000 57,000 56,000 61,000 41,000 152,000 209,000 173,000 76,700 97,100 122,000 93,000 143,000	1 2 2 2 2 2 2 1 1 1 2 4 2 1 2 2 2 2 2 2	1 1 2 2 2 2 1 1 1 2 2 2 1 1 2 2 2 1 1 2 2 1 1 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 1 2 2 2 2 2 1 1 1 1 1 2 2 2 2 2 1 1 1 1 1 2 2 2 2 2 1 1 1 1 1 2 2 2 2 2 1 1 1 1 1 2 2 2 2 2 1 1 1 1 1 2 2 2 2 2 1
Villages 38 Whitkow 39 Mullingar 40 Holbein 41 Parkside 42 Makwa 43 Livelong 44 Vawn 45 Krydor	3 2 3 2 1 2 2 4	1 2 3 2 1 2 2 2	173,000 102,000 399,000 182,000 57,500 80,000 197,000 189,000	64,600 86,000 378,000 182,000 57,500 80,000 197,000 189,000	3 2 3 2 1 2 2 2	1 1 3 2 1 2 2 2 2

TABLE 3.4 NUMBER AND CAPACITY OF LICENSED COUNTRY ELEVATORS BY DELIVERY POINT, 1962-63 AND 1969-70 (concluded)

	Numbe	er of			Number o Compa	
Delivery Point	Eleva 1962-63	1969-70		e Capacity 3 1969-70	Aug. 1, 1962	Aug. 1, 1969
	- n	umber -	- bu	shels -	- num	ber -
46 Medstead 47 Speers 48 Mayfair 49 Maymont 50 Mervin 51 Meota 52 Shell Lake 53 Rabbit Lake 54 Marcelin	1 3 2 3 2 3 2 3 5	1 3 2 3 2 3 2 3 5	69,000 168,000 57,000 168,000 128,000 136,000 121,000 244,000 411,600	69,000 256,000 132,000 147,000 104,000 136,000 121,000 238,000 413,600	1 2 1 2 2 2 2 2 2 2	1 2 1 1 2 1 2 2 2 3
Towns 55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 60 Canwood 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford 65 Leask	3 2 5 3 3 4 3 7 2 5	3 2 5 2 3 4 3 1 2 5	163,000 120,100 315,000 172,000 236,000 460,000 169,000 231,000 32,000 125,000 532,500	255,500 120,100 370,000 172,000 236,000 438,000 169,000 231,000 32,000 256,000 519,500	2 2 3 2 3 3 2 3 1 2	2 2 3 2 3 3 2 3 1 2
Greater Towns 66 Spiritwood 67 Shellbrook 68 Meadow Lake	4 6 8	4 6 8	374,300 617,000 964,000	373,300 675,000 1,083,400	4 4 4	4 3 3
Cities 69 North Battleford	l 3	3	303,000	280,000	2	2
Study Area Total	159	149	10,639,500	10,781,000	8 <sup>b</sup>	6 <sup>b</sup>

 $\overset{a}{b}$ Elevator used for storage only.  $\overset{b}{b}$ Grain companies represented are:

Federal Grain Ltd.

National Grain Co. Ltd. Parrish & Heimbecker Ltd.

Pioneer Grain Co. Ltd.

Saskatchewan Wheat Pool

United Grain Growers Ltd.

McCabe Grain Co. Ltd. (Not present in 1969-70).

Searle Grain Co. Ltd. (Not present in 1969-70).

Source: Canadian Grain Commission, Winnipeg. '

TABLE 3.5 COUNTRY ELEVATORS: OWNERSHIP, AGE AND CAPACITY BY DELIVERY POINT, 1972

	Elevator Company	Year of Co	onstruction <u>St</u>	orage Capacity
Delivery Point	Aug. 1, 1972	Elevator	Annex	Aug. 1, 1972
Derivery Forne	1374			'000 bus
Too Small to Classify				
1 Hartwell	Closed			
2 Cameo	Closed			
3 Bournemouth	Closed			
4 Dulwich	Closed			
5 Cleeves	Closed			
6 Ormeaux	Closed			
7 Ordale	Closed	3054	3050	70
8 Tallman	Sask. Wheat Pool A	1954	1952	70
	Sask. Wheat Pool B	1919	1927 & 1939	64
9 Kilwinning	Closed			
10 Redberry	Closed	1020		31
11 Scentgrass	Sask. Wheat Pool A	1930 1936		30
12 Dollywyth	Sask. Wheat Pool B	1930	1949	50
12 Polwarth	National Grain Closed	1330	1373	30
13 Cater 14 Brada	Sask. Wheat Pool A	1926	1968(2) <sup>a</sup>	53
14 braua	Sask. Wheat Pool B	1916	1940	44
15 Lilac	Sask. Wheat Pool	1924	1965	39
16 Iffley	Sask. Wheat Pool A	1930	1303	35
10 ITTICY	Sask. Wheat Pool B	1930		31
17 Ranger	Closed	, , ,		
•				
Hamlets				
18 Hatherleigh	Closed			27
19 Redfield	Sask. Wheat Pool	1931	2040	37
20 Hamlin	National Grain	1921	1940	45
21 Court - 11	Sask. Wheat Pool	1925	1961	67
21 Crutwell	Closed	1001	1052	60
22 Cavalier	Sask. Wheat Pool A	1921 1927	1952 1929 & 1950	63 70
23 Keatley	Sask. Wheat Pool B Sask. Wheat Pool A	1927	1952	66
25 Reactey	Sask. Wheat Pool B	1928	1932	54
	Sask. Wheat Pool C	1928	1332	26
24 Bapaume	Sask. Wheat Pool A	1929	1965	40
z i bapadine	Sask. Wheat Pool B	1929	1505	26
25 Robinhood	Sask. Wheat Pool	1926	1951	57
26 Fairholme	Sask. Wheat Pool A	1925	1301	29
	Sask. Wheat Pool B	1925		28
27 Sandwith	Pioneer Grain	1932	1958	56
28 Mildred	Sask. Wheat Pool	1929	1953	61
29 Belbutte	Closed			
30 Prince	National Grain	1927	1928 & 1951	68
	Sask. Wheat Pool	1922	1924 & 1954	84
31 Richard	Sask. Wheat Pool A	1947	1952	82
	Sask. Wheat Pool B	1913	1929	41
	Sask. Wheat Pool C	1915	1958	52
22 Danhalm	Sask. Wheat Pool D	1916	1940	34
32 Denholm	National Grain	1935	1910, 1940 & 194	
33 Ruddell	Sask. Wheat Pool	1920	1925 & 1957	89
33 Ruddell	Sask. Wheat Pool A	1929	3.03.7	39
34 Alticane	Sask. Wheat Pool B	1927	1917	38
35 Glenbush	Sask. Wheat Pool	1928	3000 0 3000	29
Jo dicibusti	Pioneer Grain Sask. Wheat Pool	1926	1958 & 1960	82
	Jusk. Wileat POOT	1928	1965	40

TABLE 3.5 COUNTRY ELEVATORS: OWNERSHIP, AGE AND CAPACITY BY DELIVERY POINT, 1972 (continued)

	Elevator Company	Year of C	onstruction St	orage Capacit
Delivery Point	Aug. 1, 1972	Elevator	Annex	Aug. 1, 1972
				1000 bus
36 Fielding	National Grain	1911	1916	37
	Sask. Wheat Pool	1929	1968	56
37 Mont Nebo	Sask. Wheat Pool A	1930	1950 & 1952	92
	Sask. Wheat Pool B	1928	1939	31
'illages				
38 Whitkow	Sask. Wheat Pool	1934	1951	65
39 Mullingar	Sask. Wheat Pool A	1928	1950	55
	Sask. Wheat Pool B	1928		31
40 Holbein	Sask. Wheat Pool A	1939	1939, 1950 & 195	
	Sask. Wheat Pool B	1928	1939 & 1955	86
	National Grain	1950	1940, 1949 & 195	
41 Parkside	National Grain	1928	1911, 1918 & 193	
	Sask. Wheat Pool	1959	1951	95
42 Makwa	Closed		1501	50
43 Livelong	Sask. Wheat Pool A	1925		28
2.,	Sask. Wheat Pool B	1926	1953	52
44 Vawn	Pioneer Grain	1927	1951 & 1955	85
, , , , , , , , , , , , , , , , , , , ,	Sask. Wheat Pool	1947	1940 & 1954	112
45 Krydor	Sask. Wheat Pool A	1926	1951	69
40 10 9001	Sask. Wheat Pool B	1928	1929	40
	Sask. Wheat Pool C	1942	1323	48
	Sask. Wheat Pool D	1921	1928	32
46 Medstead	Sask. Wheat Pool	1921		112-
			1926 & 1959	
47 Speers	National Grain A	1913	1916 & 1940	55
	National Grain B	1913	1968	110
40 14	Sask. Wheat Pool	1934	1917 & 1951	91
48 Mayfair	Sask. Wheat Pool	1928	1968	103
49 Maymont	Sask. Wheat Pool A	1959	1917 & 1924	91
50.44	Sask. Wheat Pool B	1917	3.050	24
50 Mervin	Sask. Wheat Pool A	1927	1952	58
	Sask. Wheat Pool B	1916	1920	46
51 Meota	Sask. Wheat Pool A	1927	1928	40
	Sask. Wheat Pool C	1929		62
52 Shell Lake	National Grain	1929	1940	52
	Sask. Wheat Pool	1929	1951	69
53 Rabbit Lake	Pioneer Grain #1	1926	1955 & 1958	90
	Pioneer Grain #2	1926	1960	62
	Sask. Wheat Pool	1926	1956 & 1968	88
54 Marcelin	Sask. Wheat Pool A	1929	1939 & 1951	98
	Sask. Wheat Pool B	1919	1929 & 1950	70
	Sask. Wheat Pool C	1939	1939 & 1952	98
	National Grain A	1918	1922 & 1940	77
	National Grain B	1922	1922 & 1952	70
'owns				
55 Debden	Sask. Wheat Pool A	1928	1953 & 1959	142
	Sask. Wheat Pool B	1920	1922 & 1963	114
56 Leoville	Sask. Wheat Pool A	1932	1949	69
	Sask. Wheat Pool B	1931	1940	51
57 Borden	National Grain	1910	1917, 1932 & 196	
or borden	Sask. Wheat Pool A	1925	1951	61
	Sask. Wheat Pool B	1956	1925	93
	United Grain Growers #		1940	52
	United Grain Growers #		1950	52

TABLE 3.5 COUNTRY ELEVATORS: OWNERSHIP, AGE AND CAPACITY BY DELIVERY POINT, 1972 (concluded)

	Elevator Company	Year of	Construction	Storage Capacity
	Aug. 1,			Aug. 1,
Delivery Point	1972	Elevator	Annex	1972
				- '000 bus
58 Edam	National Grain	1911	1911 & 1921	83
CO Dadiasan	Sask. Wheat Pool	1922	1930	(2) <sup>a</sup> 89
59 Radisson	Parrish & Heimbecker Sask. Wheat Pool	1922 1971	1940 & 1971 1922, 1931 &	
60 Canwood	National Grain	1922	1928, 1932 &	1951 90
00 00.1111000	Sask. Wheat Pool A	1961	1940 & 1952	
	Sask. Wheat Pool B	1937	1953 & 1962	
	Sask. Wheat Pool C	1923	1939	42
61 Glaslyn	Pioneer Grain #1	1926	1953 & 1960	
	Pioneer Grain #2	1926	1052	24
62 Hafford	Sask. Wheat Pool National Grain	1928 1921	1953	1022 01
02 Harrord	Pioneer Grain	1928	1913, 1918 & 1932 & 1959	1932 81 68
	Sask. Wheat Pool	1940	1953	82
63 Big River	Sask. Wheat Pool	1940	1300	32
64 Turtleford	Pioneer Grain	1916	1932, 1949 &	
	Sask. Wheat Pool	1962	1928	97
65 Leask	Sask. Wheat Pool A	1961		135
	Sask. Wheat Pool B	1919	1928, 1948 &	
	Sask. Wheat Pool C National Grain	1922	1959	92
	Pioneer Grain	1929 1928	1917, 1950 & 1930, 1939 &	1951 93 1956 117
	roncer dram	1 320	1330, 1333 α	1950 117
Greater Towns				
66 Spiritwood	Sask. Wheat Pool A	1929	1951 & 1968	81
	Sask. Wheat Pool B	1929	1930 & 1950	
	National Grain	1931	1940 & 1953	
67 Shellbrook	Pioneer Grain	1929	1930, 1940 &	1956 116
07 SHELLDLOOK	Sask. Wheat Pool A Sask. Wheat Pool B	1958 1954	1939(2) <sup>a</sup> , 1940 1954	& 1950 134 79
	Sask. Wheat Pool C	1950	1933, 1940 &	1950 108
	Sask. Wheat Pool D	1918	1939 & 1953	
	Pioneer Grain P	1922	1932, 1939(2)a	
50 14 1 1	Pioneer Grain W	1922	1949 & 1953	
68 Meadow Lake	Sask. Wheat Pool A	1936	1947 & 1948	
	Sask. Wheat Pool B	1951	1952 & 1953	
	Sask. Wheat Pool C Sask. Wheat Pool E	1953	1047 0 1040	75
	Sask. Wheat Pool F	1931 1954	1947 & 1948 1954 & 1963	
	Sask. Wheat Pool G	1940	1940, 1947 &	127 1950 127
	Pioneer Grain	1932	1948, 1949 &	
Cities				
69 North Battleford	National Grain	1972	1972	125
	Parrish & Heimbecker	1906	1960	80
	Sask. Wheat Pool A	1934	1954	79
	Sask. Wheat Pool B	1928		27

 $<sup>\</sup>ensuremath{^{a}\text{Two}}$  annexes constructed in the same year.

Source: Canadian Grain Commission, Winnipeg.

### Receipts of Grain at Country Elevators

Annual grain receipts are another measure of the importance of a grain collection and distribution center. Receipts for the crop years from 1962-63 to 1970-71 are presented in Table 3.6 for each delivery point in the study area.

For all points that were open in 1970-71, the ten-year average receipts range from 73,000 bushels at Sandwith to 1,836,000 bushels at Meadow Lake. The observation that grain receipts are commensurate with the size of the community can be illustrated by listing the ten-year average for each community size group: "too small to classify", 102,000 bushels; hamlets, 205,000 bushels; villages, 301,000 bushels; towns, 473,000 bushels; and greater towns, 1,081,000 bushels.

As grain receipts depend upon such things as crop yields and grain marketings, there is considerable variation from year to year. Total study area receipts during the decade ranged from a low of 14.5 million bushels to a high of 25.2 million bushels.

RECEIPTS OF GRAIN AT LICENSED COUNTRY ELEVATORS BY DELIVERY POINT, 1962-63 TO 1970-71 AND TEN-YEAR AVERAGE TABLE 3.6

Ten-Year Average 1960-61 to 1969-70	78 78 81 65 69	216 144 <sup>b</sup> 134 36 <sup>b</sup> 199 201 201 76	49 350 69 <sup>5</sup> 281 281 150 101 73 389 389 389 132 132 132 132	236 147 686	(17
1970-71	Closed Closed	156 177 177 99 232 255 114	288 * 30 * 30 * 30 * 30 * 30 * 30 * 30 *	191 135 902	, , ,
1969-70	63 63	124 133 * 193 198 198 14	144 380 277 236 259 110 110 356 383 390 120 120 127	128 116 955	
1968-69	52 52	182 135 * 135 166 184 71 69	00 342 342 202 202 157 1157 110 299 3338 327 110 110	133 109 677	
1967-68		200 30 125 125 210 205 104	78 360 360 17 212 212 166 198 414 414 369 112 232 112 232 159	173 177 759	
1966-67	Closed 61 Closed 47 84 84 79	317 79 155 104 289 321 142	24 509 509 304 197 1116 144 1123 1136 1144 1145 1145 1145 1146 1146 1146 114	453 197 947	
1965-66	* 093.86 * 093.86	241 Closed 53 141 84 20 269 210 95	388 384 384 384 384 394 116 116 377 410 378 378 378 378 378 378	289 175 807	
1964-65	Closed 3.9 4.9 5.5 5.0 5.0	173 ** 118 70 27 162 62 68	26 291 291 213 213 30 30 30 30 30 30 30 30 30 30 30 30 30	177 125 559	
1963-64	* * * 86 106 120 121	260 * * 198 112 260 266 144	63 111 444 1117 282 283 283 113 1149 1149 1149 1149 1149 1149 1149	364 213 726	
1962-63ª	* * * 108 120 46 71	210 * 25 72 51 180 115	147 303 303 303 328 259 131 156 118 163 163 174 174	262 163 528	
Delivery Point	Too Small to Classify 1 Hartwell 2 Cameo 3 Bournemouth 4 Dulwich 5 Cleeves 6 Ormeaux 7 Ordale	8 Tallman 9 Kilwinning 10 Redberry 11 Scentgrass 12 Polwarth 13 Cater 14 Brada 15 Lilac 16 Iffley 17 Ranger	Hamlets 18 Hatherleigh 19 Redfield 20 Hamlin 21 Crutwell 22 Cavalier 23 Katley 24 Bapaume 25 Robinhood 25 Fairholme 27 Sandwith 28 Mildred 29 Belbutte 30 Prince 31 Richard 32 Denholm 33 Ruddell 34 Alticane 35 Glenbush 37 Mont Nebo	<i>villages</i> 38 Whitkow 39 Mullingar 40 Holbein	

TABLE 3.6 RECEIPTS OF GRAIN AT LICENSED COUNTRY ELEVATORS BY DELIVERY POINT, 1962-63 TO 1970-71 AND TEN-YEAR AVERAGE (concluded)

Delivery Point	1962-63ª	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	to 1969-70
						- '000 bushe	hels -			
Parkside Makwa	278 125	349 147	139 . 95	350 100	359 130	267	257 95	289	268	265 101
Livelong Vawn	217	182 374	210	141	345	313	136	153 316	229	150 307
Krydor	303	456	248	409	200	360	333	317	409	354
Medstead	218	250	157	282	274	288	238	260	384	219
opeers Mayfair	202	235	143	267	268	223	303 158	242	271	204
Maymont	192	401	187	358	477	323	285	270	470	295
Mervin Meota	414	366 268	292	231	388 248	301	242	316	424	313
Shell Lake	264	330	168	222	328	286	268	278	271	251
Rabbit Lake Marcelin	279	378	386	387	445	380	391	518	767	350
ין דומו כמו ווו		7	2000	200	000	5	104	404	000	000
owns 55 Dahdan	265	5/13	305	404	582	200	517	802	501	121
56 Leoville	306	361	213	347	426	381	243	322	415	311
Borden	415	714	524	670	832	569	505	579	845	573
Edam Radisson	293	535	377	486	664 664	469	416	443	584	443
Canwood	628	953	563	718	1,055	828	750	936	939	757
Glaslyn Hafford	43/	702	326	475 740	463 789	394	31/	394	534	5/3
Big River	72	124	37	82	115	105	74	67	986	78
Turtleford	467	443	374	384	582	496	411	531	754	442
Leask	245	696	45/	843	99161	200	/31	935	1,013	828
Greater Towns	NC3	673	NOA	TI II	707	963	507	26.2	729	T.
Shellbrook	818	1,042	722	978	1,118	851	735	0 88 0 88 0 88	916	856
Meadow Lake	2,229	2,205	1,571	1,740	1,867	1,856	1,640	2,061	1,488	1,836
Cities										
69 North Battleford	417	622	399	489	694	469	481	574	992	480
Study Area Total	18,788	23,475	14,476	19,778	25,194	19,695	16,937	19,881	24,033	18,881

\*Storage only.

 $^{\rm 2}{\rm Rapeseed}$  is not included in 1962-63 data.  $^{\rm 2}{\rm Average}$  is for those years a delivery point had receipts.

Source: Canadian Grain Commission, Winnipeg.

### Throughput Ratios

The throughput ratio of a delivery point is the number of bushels it receives annually divided by its storage capacity in bushels (Table 3.7). It is ratio is one way to measure the efficiency of the elevator or elevators at a delivery point. The ten-year average is the average of the annual receipts for the period divided by the rated storage capacity for 1969-70. On this basis, 41 points had ratios of less than 2.0 and 19 had ratios from 2.0 to 2.9. Only Whitkow, Medstead and Mervin had ratios of 3.0 or over. The lowest ten-year average, 0.9, was recorded at both Crutwell and Mont Nebo. Contrary to what might be expected, larger centers did not usually have higher throughput ratios than smaller centers.

It has been suggested that an elevator paying for itself should maintain a throughput ratio that is between 3.0 and 4.0.2 Speculation suggests the following example. Suppose a one-elevator delivery point has a storage capacity of 50,000 bushels for which a throughput ratio of 2.0 would require an annual handling of 100,000 bushels. To handle that much grain, the elevator agent would need to load only 50 cars each with a capacity of 2,000 bushels. That would be one car for every week for 50 weeks of the year. A throughput ratio of 5.0 would entail the annual handling of 250,000 bushels and require the agent to load 2.5 cars every week of the year. This does not seem unreasonable.

 $<sup>^{1}</sup>$ A further comparison of throughput ratios is presented in Part IV, Table 4.5.

<sup>&</sup>lt;sup>2</sup>D. Zasada, "The Probable Effects of Application for Railway Branch Line Abandonment on the Grain Elevator Industry," <u>Canadian Farm Economics</u>, April, 1968, p.21.

TABLE 3.7 THROUGHPUT RATIOS BY DELIVERY POINT 1962-63, 1969-70 AND TEN-YEAR AVERAGE 1960-61 TO 1969-70

Delivery Point	1962-63	1969-70	Ten-Year Average 1960-61 to 1969-70
Too Small to Classify	*	Closed	
1 Hartwell	*	Closed	-
2 Cameo 3 Bournemouth	2.5	Closed 2.7	2.2
4 Dulwich	2.0	Closed	۷ ، ۷
5 Cleeves	2.1	Closed	-
6 Ormeaux	1.6	Closed	
7 Ordale	1.3	0.9	1.2
8 Tallman	1.4	0.8	1.4
9 Kilwinning	*	Closed	-
10 Redberry	0.6	*	1.1
11 Scentgrass	2.3	2.1	2.2
12 Polwarth	1.4	1.9	1.7
13 Cater	1.7	*	1.2
14 Brada	1.8	1.7	2.0
15 Lilac	2.6	2.5	2.5
16 Iffley	1.7	1.0	1.4
17 Ranger	2.8	0.5	2.7
Hamlets			
18 Hatherleigh	1.5	1.4	1.6
19 Redfield	1.7	2.8	2.7
20 Hamlin	2.2	2.9	2.7
21 Crutwell	0.9	*	0.9
22 Cavalier	2.1	1.8	1.8
23 Keatley	1.5	1.4	1.4 2.1
24 Bapaume	1.9	3.7 1.7	1.7
25 Robinhood	1.8	1.7	1.8
26 Fairholme	2.3	1.6	1.3
27 Sandwith	1.0	1.8	1.7
28 Mildred	2.0 3.9	*	2.2
29 Belbutte		2.3	2.2
30 Prince	2.3 1.7	1.8	1.9
31 Richard	1.7	1.8	2.1
32 Denholm	1.2	1.6	1.6
33 Ruddell	1.7	1.1	1.4
34 Alticane 35 Glenbush	1.9	1.5	1.5
36 Fielding	1.8	2.3	2.2
37 Mont Nebo	1.0	0.9	0.9

See footnotes at end of table

TABLE 3.7 THROUGHPUT RATIOS BY DELIVERY POINT 1962-63, 1969-70 AND TEN-YEAR AVERAGE 1960-61 TO 1969-70 (concluded)

			Ten-Year Average 1960-61 to
Delivery Point	1962-63	1969-70	1969-70
Villages 38 Whitkow 39 Mullingar 40 Holbein 41 Parkside 42 Makwa 43 Livelong 44 Vawn 45 Krydor 46 Medstead 47 Speers 48 Mayfair 49 Maymont 50 Mervin 51 Meota 52 Shell Lake 53 Rabbit Lake 54 Marcelin	1.5 1.6 1.3 1.5 2.2 2.7 2.0 1.6 3.2 2.0 3.5 1.1 3.2 1.8 2.2 1.1	2.0 1.3 2.5 1.6 0.1 1.9 1.6 1.7 3.8 1.4 1.8 1.8 3.0 1.0 2.3 2.2	3.6 1.7 1.8 1.5 1.7 1.9 1.6 1.9 3.2 1.3 1.5 2.0 3.0 1.5 2.1
Towns 55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 60 Canwood 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford 65 Leask	1.6 2.5 1.3 3.2 1.2 1.4 2.6 1.9 2.2 3.7 1.8	2.0 2.7 1.6 2.8 1.9 2.1 2.3 2.7 2.1 2.1	1.6 2.6 1.5 2.6 1.8 1.7 2.2 2.3 2.4 1.7
Greater Towns 66 Spiritwood 67 Shellbrook 68 Meadow Lake	1.4 1.3 2.3	2.0 1.4 1.9	1.5 1.3 1.7
Cities 69 North Battleford	1.4	2.0	1.7
Study Area Total	1.8	1.8	1.7

<sup>\*</sup>Storage only.

Source: Canadian Grain Commission, Winnipeg.

# Acres for Delivery Quota Purposes

Prior to the beginning of the 1970-71 crop year, the basis for determining the general grain delivery quota for each producer was his acreage in cereal crops, cultivated forage crops and summer fallow. This land was referred to as "specified acreage". Other miscellaneous crops, native pasture and unimproved farmland were not part of the specified acreage and neither were oilseeds which had their own quotas based on declared seeded acreage.

The number of specified acres tributary to a delivery point indicates the amount of available grainland as well as the demand for grain handling and storage facilities. Table 3.8 shows the specified acreage for each delivery point from 1962-63 to 1969-70. In 1969-70, 2,642,521 acres of the 4,040,616 acres of farmland in the study region were specified acreage. A one-bushel quota would, therefore, result in the delivery of about 2,642,521 bushels of grain.

From 1962-63 to 1969-70, the total specified acreage in the study area increased by 8.0 percent. Seventeen of the delivery points had decreases and 42 had increases. The decreases do not include the closure of elevators at several points. Most communities "too small to classify" lost specified acreage while hamlets, villages, towns and greater towns usually gained such acreages. The largest decrease, 52.2 percent, occurred at Whitkow and the largest increase, 89.7 percent, occurred at Bapaume.

Following the Operation LIFT program of 1970-71, further changes in the delivery quota system were introduced for the 1971-72 crop year. Under the new system, each producer was required to calculate the total number of his assignable acres by totaling his 1971 acreages in (1) the six quota grains 1, (2) summer fallow, (3) other miscellaneous annual crops and (4) perennial forage up to one third of the total of items (1) to (3). Subject to certain regulations, total assignable acres could be distributed for quota purposes to any one of the quota grains whether or not the producer had land seeded to that particular crop in 1971. In consequence, there are about 16 different delivery quotas, each with a separately assigned acreage that may be either terminated or increased independently by the Wheat Board.

Table 3.9 details the seeded and assigned quota acreages by delivery point in the Shellbrook-Turtleford region for the 1971-72 crop year. In the study area, quota acres assigned to durum and other wheat amounted to more than three times the acreage seeded to all wheat. The ratios of seeded to quota acres for the other grains were: oats, 1:0.5; barley, 1:1.5; rye, 1:1.2; flax, 1:3.0 and rape, 1:1.3. Fielding is an example of a delivery point where producers assigned a portion of their quota acres to a crop they did not plant in 1971. Quota acres there were assigned to Hercules durum although none was planted.

<sup>&</sup>lt;sup>1</sup>Wheat including durum, barley, oats, rye, flaxseed and rapeseed.

TABLE 3.8 CANADIAN WHEAT BOARD SPECIFIED ACREAGE FOR DELIVERY QUOTA PURPOSES BY DELIVERY POINT, 1962-63 TO 1969-70

Delivery Point	1962-63ª	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	Percent of Change 1962-63 to 1969-70
					- acres -				
Too Small to Classify ] Hartwell	*	*	Closed						
2 Cameo	÷	- K (	-jc I	* r	Closed	0	7	1	
3 Bournemouth	5,269	5,348	5, -35 9,865	4,561	5,2/y	6,063	0,1/3	876,/	6.24+
	13,221	13,649	10,396	7,358	6,068	Closed			
	13,942	14,268	14,418	15,116	13,070	Closed	10 070	0 065	1 36
/ Ordale & Tallman	29,571	29,445	29,020	28,000	29,157	27,655	26,365	19,643	-33.6
	- *	*	*	Closed			,	,	
	5,872	7,239	8,014	7,916	8,184	8,217	* C	* C	ŗ
	17,568	19,354	18,341	0 460	16,510	16,904 8 032	0,827	0 400	+5.7
12 Polwarth	9,620	7,134	5.960	3,062	2,533	2,838	10°0	*	2
	22,327	23,607	24,550	22,878	22,288	25,050	24,822	22,680	9.1+
	26,853	26,585	27,671	26,344	27,663	26,556	25,936	24,456	o. €
16 Iffley	17,695	17,120	15,817	16,423	14,842	14,741	10,884	10,06/	143.1
- Natiger		2,010	6	)	)	)	-		
Hamlets	336 7	6 901	7 609	7 146	7 026	679	11 087	9,333	+28.4
18 Hatherleign 19 Redfield	16,895	11,002	11,253	9,413	9,609	15,998	19,473	16,800	9.0-
	36,958	38,369	39,443	40,803	40,341	43,606	44,365	43,517	+17.7
	12,836	13,913	13,553	0,200	5,431	5,099	35 961	3/1 176	7,
22 Cavaller 23 Kostlov	32,528	27, 233	28,722	22,700	28,031	27,431	29,111	28,434	+3.1
	17,666	19,381	18,179	20,582	18,266	20,773	22,528	33,517	+89.7
25 Robinhood	16,065	15,282	16,284	15,019	16,588	17,697	21,466	20,890	+30.0
	12,770	11,703	11,227	10,277	12,332	14,805	16,547	19,005	+48.8
27 Sandwith	8,052	8,931	10,016	9,5U5 16,903	16,031	12,543	13,883	13.946	-18.4
	16,401	15,488	16,820	12,833	12,693	13,209	12,517	*	
	37,413	37,130	36,946	36,625	38,750	40,243	44,790	46,348	
	45,973	49,241	49,085	48,974	50,839	52,106	51,246	45,850	
	41,353	42,759	42,448	46,005	48,145 12 515	50,28/ 19 935	19,820	18,291	
33 KUddell	10,007	19,031	19,654	17,128	15,330	14,308	14,294	15,245	
	21,008	20,845	20,848	22,143	22,590	21,206	21,888	23,119	+10.0
	29,837	29,171	29,503	29,723	29,743	30,356	28,556	28,412	
37 Mont Nebo	21,906	20,762	20,956	21,438	21,636	23,882	19,233	18,219	
Villages									
38 Whitkow	41,744	45,611	44,180	43,217	41,188	23,716	20,939	19,935	-52.2
39 Mullingar 40 Holbein	63,304	20,718 68,507	71,758	74,425	78,225	81,798	87,544	85,941	
									(point; +100)

See footnotes at end of table

TABLE 3.8 CANADIAN WHEAT BOARD SPECIFIED ACREAGE FOR DELIVERY QUOTA PURPOSES BY DELIVERY POINT, 1962-63 TO 1969-70 (concluded)

Delivery Point		41 Parkside 42 Makwa 43 Livelong 44 Vawn 45 Krydor 46 Medstead 47 Speers 48 Mayfair 49 Maymont 50 Mervin 51 Meota 52 Shell Lake 53 Rabbit Lake 54 Marcelin	Towns 55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 60 Canwood 61 Glaslyn 62 Hafford 63 Big River 65 Leask	Greater Towns 66 Spiritwood 67 Shellbrook 68 Meadow Lake	Cities 69 North Battleford	Study Area Total	*Storage only.
1962-63 <sup>a</sup>		42,981 30,334 27,502 39,099 49,314 23,198 41,620 23,042 40,145 37,196 42,497 30,775	48,551 43,975 84,648 56,373 62,381 90,163 47,090 45,653 105,028	71,253 107,164 228,050	56,747	2,446,764	
1963-64		42,566 33,415 29,338 39,407 49,549 24,163 43,167 23,649 40,384 37,133 22,561 41,514 30,345 59,367	60,594 45,321 85,179 56,957 64,684 93,932 49,235 79,572 19,090	72,069 107,325 222,051	54,597	2,431,984	
1964-65		44,330 33,705 39,192 39,676 50,280 26,687 43,132 44,328 40,480 22,098 42,711 22,098 42,711 57,658	61,894 47,241 83,746 59,722 65,490 95,274 50,664 80,236 19,501 51,188	74,565 106,584 221,279	53,317	2,512,000	
1965-66		43,331 32,312 27,952 37,861 48,237 30,821 41,905 41,905 38,934 21,412 43,664 30,817 57,561	63,558 47,348 84,383 58,398 65,947 93,684 50,756 78,764 19,829 51,433	73,872 99,831 202,389	55,192	2,460,153	
1966-67	- acres	42,228 31,999 26,929 37,689 48,078 30,484 40,196 26,950 42,545 38,648 22,044 44,282 31,347	66,446 46,726 84,936 67,375 64,687 95,392 49,286 78,534 21,768 21,768 51,512	74,694 103,003 197,926	60,554	2,469,509	
1967-68		40,565 31,728 27,179 27,179 39,683 40,296 40,296 42,961 42,961 42,961 42,817 43,666 36,513	82,748 48,200 84,457 66,072 66,072 66,072 97,091 48,615 81,413 22,770 61,267	79,611 100,618 202,846	61,838	2,506,630	
1968–69		41,329 38,455 30,983 44,038 51,130 39,560 41,803 28,766 43,115 41,362 41,362 44,618	88,343 45,974 85,311 70,596 65,163 106,144 53,215 88,000 25,691 67,019	88,169 108,874 233,300	64,160	2,637,452	
1969-70		40,115 36,299 27,795 43,961 52,392 46,368 44,028 39,978 18,074 18,074 51,150 58,190	86,660 47,389 87,139 74,518 65,873 104,460 54,963 93,525 27,383 117,744	91,955 105,634 232,166	71,584	2,642,521	
Percent of Change 1962-63 to 1969-70		-6.7 +19.7 +11.1 +11.4 +6.2 +83.3 +83.3 +11.4 +9.7 +7.5 -20.0 +18.0 +18.0 +18.0	+78.5 +7.8 +2.9 +32.2 +4.6 +15.9 +16.7 +13.8 +50.3 +12.1	+29.1 -1.4 +1.8	+26.1	+8.0	

<sup>a</sup>Durum excluded from specified acreage in 1962-63.

Source: Canadian Wheat Board, Winnipeg.

TABLE 3.9 SEEDED AND QUOTA ACRES BY DELIVERY POINT, 1971-72

	- 1				Too Small to C	Classify				
			11 Scentgrass	SS	olwart		14 Brada		15 Lilac	
S	Summer Fallow	Quota	Summer Fallow	Quota	Summer Fallow	Quota	Seeded & Summer Fallow	Quota	Seeded & Summer Fallow	Quota
	Acreage	Acres	Acreage	Acres	Acreage	Acres	Acreage	Acres	Acreage	Acres
Hercules Durum	ı	1	ı	1	ı	1	140	70	130	130
% of Total		1	ı	1		1	0.7	0.4	0.5	0.5
Other Durum	ı	50	25	162	1	1	20	305	23	245
% of lotal	1 6	0.3	0.1	0.0	,	1	0.1	1.4	0.1	1.0
All Other Wheat	3,858	11,783	2,449	9,146	1,365	3,883	4,106	12,145	4,318	15.617
% of Total	22.3	69.4	14.0	52.6	12.8	36.6	18.6	55.1	17.4	62.9
Dats	649	332	006	158	494	637	648	295	896	328
% of Total	တ္	ص ص	5.2	0.9	4.7	6.0	2.9		0,0	2 -
Selected Oats	1	1	1	100	1	1	1	9/	f	) [
% of Total	1	ı		0.6	1	ı		0.3	1	,
Barley	2,299	1,877	2,460	3,016	2.013	3.328	3,098	1.986	2 830	1 858
% of Total	13.3	11.0	14.1	17.4	18.9	31.3	14.0	0.6	11 4	7,000
Selected Barley	1	350	1	20		95	) 1	1.550	-	1 350
% of Total	1	2.1	ŧ	0.3		0.0	1	0006		, c
Rye	144	20	130	295	20	) I	410	030		ר. ר
% of Total	0.8	0.3	0.7	1.7	0.0	1	0 -	00 V	1 1	
Other Rye	ı	1	1	1		ı	1 8	1 1		, ,
% of Total		è	1	1	1	1	1	ı	. 1	
Flaxseed	90	100	1	185		1	ŧ	80		101
% of Total	0.5	9.0	1		ı	1	ı	0.4	ı	2 -
Flaxseed for Crushing	ı	1	ı	1	\$	1	ı	- 1		- 1
% of Total	ı	1		1	1	1	ı	ı	,	ı
Low Erucic Acid Rape	770	770	22	22	ı		320	220	310	175
% of Total	4.5	4.5	0.1	0.1	1	ı	1.4	0.0	2.5	0.7
Other Rapeseed	1,861	1,676	3,513	4,237	1,865	2,681	4.770	4.379	4.391	5 123
% of Total	10.8	6.6	20.1	24.4	17.5	25.2	21.6	19.9	17.7	20.6
Misc. Crops	1	ı	14	1	ı	ı	19		179	
% of Total	1	ı	0.1	1	ı	1	0.1	ı	0.7	,
Summer Fallow	6,528	1	6,744	1	4,128	1	7,922	1	10,796	
% of Total	37.8	1	38.6	ı	38.8	1	35.8	ı	43.5	1
Subtotal	16,199	16,988	16,257	17,371	9,885	10,624	21,453	22,035	23.945	24.836
% of Total	93.8	100.0	93.0	100.0	92.9	100.0	97.1	100.0	96.4	100.0
Perennial Forage	1,065	ı	1,222	1	759	1	629	1	891	E
% of Total	6.2	1	7.0	1	7.1	ı	2.9	1	3.6	ı
TOTAL IMPROVED ACRES	17,264	16,988	17,479	17,371	10,644	10,624	22,112	22,035	24,836	24,836
5		0.00	0.00	0.00	0.00	100.0	0.001	0.00	100.0	0.001

TABLE 3.9 SEEDED AND QUOTA ACRES BY DELIVERY POINT, 1971-72 (continued)

Too	Too Small to Classify	assify (cont	ntinued)	7	00 Una 1 :	Hamlets	ets 22 Cavaling	2	20 14507 66	
ns.	Seeded & Summer Fallow Acreage	Quota Acres	Seeded & Summer Fallow Acreage	Quota Acres	Seeded & Summer Fallow Acreage	Quota Acres	Seeded & Summer Fallow Acreage	Quota Acres	Seeded & Summer Fallow Acreage	Quota
Hercules Durum	1	1	ı	1	1	1	ı	1	1	ı
% of Total	ſ	ı	1	1	ſ	1	ı	1	1	1
Other Durum	ı	1	ı	1	1	1	ī	f	1	ı
% of Total	1	1	1 9	1 1	1	1	1 6	1 6	1	1 :
All Other Wheat	2,823	8,956	2,226	4,907	7,683	28,286	3,972	18,442	5,662	16,131
% of lotal	9./1	59.3	23.9	52.6	16.0	2.69	0.1.0	54.5	20.02	2.09
Uats	1,465	787	33	335	1,6/3	301	2,089	1,205	0.4,-	323
% of lotal	7.	2.0	3.5	3.0	3.3	0.0	0.0	3.7	2.0	7.0
Selected Oats	1	1 1	1 1	200	1 1	0		00-1		0.0
Barlev	2,117	3.157	1.664	1.663	5.685	2.356	5.106	5.468	4.427	4.166
% of Total	3,2	20.9	17.8	17.8	- 2	4.9	14.9	16.1	16.4	15.5
Selected Barley	1	100	t	850	1	2,650	1	1,550	1	1,100
% of Total	ı	0.7	1	9.1	•	5.6	f	4.6	1	4.1
Rye	85	99	145	230	105	195	482	325	70	1
% of Total	0.5	0.4	1.6	2.5	0.2	0.4	1.4	1.0	0.3	ı
Other Rye	ı	1	1	1	ſ	1	ī	1	1	1
% of lota!	1 (	1 (	1 0	1 <	1 L	I L	t	I L	ı L	1 0
Flaxseed	40	40	30	94	205	465	1	00 00	2 -	040
% of lotal	7.0	0.3	0.3	0	4.0	0.1	1	0.5	0	7.0
Flaxseed Tor Crusning	ı	1	1	1	1	4		, 1	ŧ i	1 1
Low Frucic Acid Rana		20	1 1	1	1 060	684	ונר	7	223	269
% of Total	1	0.1	1	1	2.2	1.4	0.1	0.1	0.8	1.0
Other Rapeseed	1,443	1,970	1,002	1,186	9,741	12,738	5,786	6,560	3,551	4,717
% of Total	0.6	13.1	10.8	12.7	20.3	26.7	16.8	19.4	13.1	17.6
Misc. Crops	45	1	1	1	•	1	1	ı	28	3
% of Total	0.3	ı	1	1	1	1		1	0,1	,
Summer Fallow	5,739	1	3,704	1	19,570	ı	13,627	1	10,444	
% of Total	35.7		39.7	1 1	40.7	1 1	39.7	1 0	38.7	1 0
Subtotal	13,757	15,091	9,102	9,325	45,722	47,775	31,06/	33,880	25,830	26,796
% 01   Otal	85.6 208	0.00	9/.6	0.00	95.1	0.001	3 244	0.001	95.0	0.001
% of Total	14 4	1	2 2	1 1	246,7	1	F 15.0	. 1	4.4	۱ :
TOTAL IMPROVED ACRES	16.065	15,091	9.325	9,325	48.064	47.775	34,311	33,880	27.007	26,796
% of Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(continued)

TABLE 3.9 SEEDED AND QUOTA ACRES BY DELIVERY POINT, 1971-72 (continued)

	24 Banaumo		Pochinhood RC	00	Hamlets (conti	(continued)	1 1			
1 00	Seeded & Summer Fallow	Quota	Seeded & Summer Fallow	Quota	Seeded & Summer Fallow	Quota	Seeded & Summer Fallow	Quota	Seeded & Summer Fallow	Quota
	Acreage	Acres	Acreage	Acres	Acreage	Acres	Acreage	Acres	Acreage	Acres
Hercules Durum	1	1	1	t	1		1	1	,	1
% of Total	1	1	1	ı	1	2		ı	1	1 1
Other Durum	1	ı	1	1	1	1	1	ſ	1	1 1
% of Total	ş	1	ı	1		1		ı		, ,
All Other Wheat	5,937	20,626	946	2,799	1.948	6.730	1.406	, 368	088	0101
% of Total	14.4	51.1	4.5	14.3	12.2	42.8	0000	42 5	000 r	04764
Oats	5,235	3,208	2,138	1.860	2,224	1.755	1.901	1 561	7.55	20.0
% of Total	12.7	7.9	10.1	9.5	14.0	] ] ]	12.7	10.4	000	127
Selected Oats	1	146	1	170	1	100	. 1	250	) 1	· 1
% of Total	1	0.4	1	0.9	1	0.6	1	1.7		,
Barley	9,785	14,248	5,547	12,099	2,331	3,454	3,047	4.315	4.792	8.870
% of Total	23.8	35.3	26.3	61.7	14.6	22.0	20.3	28.8	30.1	59,5
Selected Barley	8	250		700	1	250	•	200	1	250
% of Total	1	9.0	•	3.6	1	1.6	1	e	,	1.7
Rye	246	195	15	1	106	,	1	) 1	,	- 1
% of Total	9.0	0.5	0.1	1	0.7	1	1	ı	ı	•
Other Rye		1	1	1	ı	1	,	ł	1	,
% of Total	1	ı	1	1	1	1	,	1		•
Flaxseed		ı		ı		1	•	ı	1	,
% of Total	1	ı		1	1	ı		i	1	1
Flaxseed for Crushing	ı	ı	1	1	1	1	1	1	ŧ	,
% of Total	1	1	•	1	1	ı	,	ı		ı
Low Erucic Acid Rape	10	10		ı	1	ı	1	1	,	ı
% of Total	0.1	0.1		ı	1	1	ı	1	,	1
Other Rapeseed	1,603	1,656	1,603	1,966	2,550	3,446	1,487	2,291	849	1,277
% of Total	ອີ	4.1	7.6	10.0	16.0	21.9	9.6	15.3	5.3	8,6
Misc. Crops	129	ı	15	1		ŀ	1	1	407	ı
% of Total	0.3	1	0.1	1	ı	1	1	1	2.6	•
Summer Fallow	12,674	ı	6,170	1	5,224	ı	6,020	ı	4,268	1
% of Total	30.8	ı	29.3	1	32.8	1	40.1	,	26.8	1
Subtotal	35,619	40,339	16,434	19,594	14,383	15,735	13,861	14,985	12,761	14,899
% of lotal	86.6	100.0	78.0	100.0	90.3	100.0	92.3	100.0	80.2	100.0
Perennial Forage	5,518	ı	4,653	1	1,554	1	1,164	ı	3,156	1
% OI TOTAL	13.4	1 0	22.0	1 -	9./	ı	7.7	1	19.8	1
UIAL IMPROVED ACKES	41,13/	40,339	21,087	19,594	15,937	15,735	15,025	14,985	15,917	14,899
% O1 10ca1	0.00-	0.00	100.0	0.00	100.0	100.0	0.001	0.001	0.001	100.0

TABLE 3.9 SEEDED AND QUOTA ACRES BY DELIVERY POINT, 1971-72 (continued)

					Hamlets (continued	:inued)				
	30 Prince		12		32 Denholm		33 Rudde		1 - 1	Je
	Seeded & Summer Fallow Acreage	Quota Acres	Seeded & Summer Fallow Acreage	Quota Acres	Seeded & Summer Fallow Acreage	Quota Acres	Seeded & Summer Fallow Acreage	Quota Acres	Seeded & Summer Fallow Acreage	Quota Acres
Hercules Durum	1	1	ı	1	ı		100	100	ı	1
% of Total	1				1		9	9	1	1
Other During			30%	650	001	000			ı	,
Caler Dardin	ı		000	0 5	) (	000	070	0 5	8	
% of lotal	1 (	1 6	0	4.1	0.3	٠ ا	1.0	0	1 1	1 ;
All Other Wheat	8,969	32,362	9,103	29,368	11,021	32,209	4,789	12,842	4,079	10,799
% of Total	18.6	69.3	19.9	64.6	20.8	2.09	26.8	71.8	22.7	0.09
Oats	2,631	245	1,469	358	1,211	453	937	45	2,541	1,475
% of Total	5.5	0.5	3.2	0.8	2.3	0.8	5.2	0.3	14.2	8.2
Selected Oats	ı	ł		155	1	160	1	1	t	20
% of Total	1	1	,	0.3	1	0°3	1	1	1	0.3
Barley	6,139	4,353	5,547	4,785	5,138	3,541	1,899	1.654	3,326	4.672
% of Total	12.7	ر ص 3	12.1	10.5	7.6	6.7	10.7	9.2	18.5	26.0
Selected Barley		2,050	1	1.750	. 1	2,500	1	150	1	50
% of Total	1	4.4	1	ດ . ຕ	,	4.7	ı	0.8	1	0.3
Rve	205	225	886	210	110	100	130	100	148	138
% of Total	0.4	0.5	0.2	0,5	0,2	0.2	0.7	0.6	0	0 -0
Other Rve	1	1			1	1	. 1		) [	
% of Total		1 8				1		1 1	ır	
Flaxcood	35	217	α π	290	C Y	100	1	A.O.	C	V
% of Total	0.1	0.4	200	9.0		0.0	1 1		000	0
Flaxseed for Crushing		- 1	1 1	) 1	- 1	160	1	) 1	) I	)
% of Total	1	1	1	1	,	0.3	,	ŝ	í	ı
Low Erucic Acid Rape	De	230	630	019	2.220	2,300	525	480		1
% of Total	8	0.5	1.4	1,4	4.2	4.3	2.9	2.7	ı	3
Other Rapeseed	7,155	7,035	7,790	7,277	11,032	10,554	2,031	2,455	671	753
% of Total	14.8	15.1	17.0	16.0	20.8	19.9	11.3	13.7	3.7	4.2
Misc. Crops	30	ŧ	73	1	202	ı	240	1	1	ı
% of Total	0.1	1	0.1	ı	0.4	1	1.3	1	1	ı
Summer Fallow	16,937	1	18,545	1	20,307	\$	6,223	1	6,154	ı
% of Total	35.2	1	40.5	1	38.2	1	34.8	1	34.2	1
Subtotal	42,101	46,717	43,370	45,453	51,481	53,075	16,894	17,886	16,969	17,977
% of Total	87.4	100.0	94.7	100.0	97.0	100.0	94.4	100.0	94.4	100.0
Perennial Forage	6,057	1	2,427	ı	1,594	1	1,008	ı	1,008	I
% of lotal		1	ຕຸດ	ı	3.0	1	2.6	1	5.6	í
TOTAL IMPROVED ACRES	(ES 48,158	46,717	45,797	45,453	53,075	53,075	17,902	17,886	17,977	17,977
% of lotal	100.0	0.001	0.00	0.00	0.001	100.0	0.00	0.001	0.001	0.00

TABLE 3.9 SEEDED AND QUOTA ACRES BY DELIVERY POINT, 1971-72 (continued)

	35 Glenbush		Hamlets (cc 36 Fieldi	(concluded)	37 Mont Nebo	bo	38 Whitkow	Villages	iges 39 Mullingar	Jar.
, vi	Seeded & Summer Fallow Acreage	Quota	Summer Fallow Acreage	Quota Acres	Seeded & Summer Fallow Acreage	Quota Acres	Seeded & Summer Fallow Acreage	Quota Acres	Seeded & Summer Fallow Acreage	Quota
Hercules Durum	1	ì	ŧ	ŧ	ı	8	1	1	1	,
% of Total	1	1	1	1	1	1	ı	1	ı	ı
Other Durum	1	1	1	180	1	1	1	ı	ı	1
% of Total		ı	1	9.0	,	1	ı	1	1	,
All Other Wheat	768	4,129	5,879	18,255	4,148	12,768	6,785	20,229	1,602	6.750
% of Total	3.5	19.1	20.5	64.6	19.9	63.5	23.5	71.2	13.8	51.1
Oats	3,226	1,943	2,090	1,187	1,165	125	1,833	292	2,084	1,182
% of Total	14.8	0.6	7.3	4.2	5.6	9.0	6.3	1.0	15.4	8.9
Selected Oats	1	65		700	ı	1	•	140	1	150
% of Total		0.3	1	2.5	1	1	1	0.5	1	
Barley	6,491	13,490	4,344	3,364	1,845	3,075	3,028	2,308	2,732	3,613
% of Total	29.9	62.4	15.2	11.9	ω ω	15.3	10.5	8.1	20.2	27.4
Selected Barley	1	250	1	1,200	1	ì	1	1,200	1	750
% of lotal	1 ;	-	1	4.3	1	1	8	4.2	ı	5.7
Rye	09	120	1,115	1,125	450	401	316	296	•	1
% of Total	0.3	9.0	3.9	4.0	2.2	2.0			\$	ı
Other Rye	ı	ı	1	1	1	1	1	ł	1	ı
% of lotal	1	ı	ı	ı	1	ı	ŧ	ı	1	1
Flaxseed			1	1	1	ı	ı	80		ı
% of Total	ı	ı	1	1	1	ı	1	0°3		ı
Flaxseed for Crushing		1	1	F	1	ı	1	ı	•	ı
% of Total		ı	1	t		i	ı	1	1	1
Low Erucic Acid Rape		3	1,539	1,321	i	1	645	830	ı	,
% of Total	1	1	5.4	4.7	•	ı	2.2	2.9	1	,
Other Rapeseed	966	1,614	838	923	2,323	3,749	2,991	3,041	674	762
% of Total	4.6	7.5	2.9	3.2	1.1	18.6	10.3	10.7	5.0	5.8
Misc. Crops	1	ı	339	1		1	35	1		ı
% of Total		1	1.2	1	1	1	0.1	1	1	1
Summer Fallow	8,152	i	9,803	1	7,003	ı	10,887	1	4,688	
% of Total	37.5	1	34.2	1	33.5	ı	37.6	ı	34.6	î
Subtotal	19,692	21,611	25,947	28,255	16,934	20,118	26,520	28,416	11,780	13,207
% of lota!	90.0	100.0	90.6	100.0		0.001	91.6	0.00	0./8	0.001
Perennial Forage	2,050	1	2,695	i	3,946	ı	2,429	ı	1,753	ı
% of lotal	4.6	8	9.4	1	18.9		8.4	•	13.0	•
TOTAL IMPROVED ACRES	21,742	21,611	28,642	28,255	20,880	20,118	28,949	28,416	13,533	13,207
% of Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3.9 SEEDED AND QUOTA ACRES BY DELIVERY POINT, 1971-72 (continued)

					Villages (continued	inued)				
	40 Holbein	in	41 Parkside	de	43 Livelong		44 Vawn		45 Krydor	
	Seeded & Summer Fallow	Quota	Seeded & Summer Fallow		Seeded & Summer Fallow	Quota	Seeded & Summer Fallow	Quota	Seeded & Summer Fallow	Ouota
	Acreage	Acres	Acreage	Acres	Acreage	Acres	Acreage	Acres	Acreage	Acres
Hercules Durum	ı	ı	1	1	ı	1	1	1	ŧ	,
% of Total	1	1	1	ı	1	1		ı	ŧ	,
Other Durum	1	1	1	1	•	ı	•	1	1	25
% of Total	,	1		1	1	ı	1	i	1	0.1
All Other Wheat	13,407	44,097	3,403	12,265	1,197	290,9	8,391	30,846	16,588	41,830
% of Total	13.7	45.7	8.1	32.2	4.0	22.1	17.6	67.1	30.9	79.3
Oats	4,483	1,820	3,558	1,950	4,717	5,095	2,641	621	3,128	633
% of Total	4.6	1.9	8.5	2.1	16.0	18.6	5.5	1.3	5.8	1.2
Selected Oats	,	276	1	200		200	1	ı	1	35
% of lotal	1 :	0.3	1	0.5	1	1.0	1	ı	1	0.0
Barley	19,204	23,332	8,644	10,912	6,722	11,186	5,288	5,989	5,633	4,844
% of lotal	16.7	24.2	50.6	28.6	22.8	40.7		13.0	10.5	9.5
Selected Barley	1	2,110	1	1,000	1	200	1	350	3	650
% of lotal	1 (	2.2	1 1	5.6	1 ;	0.7	1	0.0	9	1.2
Rye	9/9	1,195	698	1,311	20	1	1,134	1,070		30
% of Total	9.0	1.2	2.1	3.4	0.1	1	2.4	2.3		0.1
Other Rye	1	1		130	1	1		ł	1	1
% of lotal	1	I	I	0.3	ı	1	1	F	1	
Flaxseed	22	355	t	1	ı	1	9	1	1	27
% of Total	0.0	0.4	1	ł	1	ı	t	1	8	0.1
Flaxseed for Crushing	- 6t	1	1	1	1	1	1	1	1	. 45
% of Total		ı	ŧ	1		ŧ	1	1	1	0.1
Low Erucic Acid Rape		629	91	16	1	30	ŧ	1	738	869
% of Total		0.7	0.1	0.1	,	0.1		ı	1.4	1.2
Other Rapeseed	14,089	22,596	5,102	10,372	2,886	4,682	5,929	7,119	4,049	3,901
% of Total	14.4	23.4	12.2	27.2	8°6	17.1	12.4	15.5	7.5	7.4
Misc. Crops	280	1	∞ ,	ı	p	ı	1	1	40	ı
% of Total	0.3	í	0.1	1	ı	ı	1	1	0.1	1
Summer Fallow	35,187	1	10,364	ı	8,657	1	16,553	ı	19,510	í
% of Total	36.1	t	24.7	1	29.4	t	34.6	ı	36.4	1
Subtotal	88,858	96,410	31,964	38,156	24,200	27,460	39,936	45,995	49,686	52,718
% of Total	91.1	100.0	76.4	100.0	82.1	100.0	83.6	100.0	95.6	100.0
Perennial Forage	8,/33	1	9,901	ı	5,281	ı	7,854	I	3,989	1
% of lotal		1 (	23.6	g (	6./1	1 :	16.4	1	7.4	ı
TOTAL IMPROVED ACRES	37,591	96,410	41,865	38,156	29,481	27,460	47,790	45,995	53,675	52,718
33	-								0.00	0.00

TABLE 3.9 SEEDED AND QUOTA ACRES BY DELIVERY POINT, 1971-72 (continued)

	CPCM 5V	7	3 LV		ges	(continued)			C	
	40 Medstead	read	<b>\</b>	S	48 Mayra1		- 1	1	50 Mervin	ni
	Summer Fallow	Quota	Summer Fallow	Quota	Summer Fallow	Quota	Seeded & Summer Fallow	Quota	Seeded & Summer Fallow	Quota
	Acreage	Acres	Acreage	Acres	Acreage	Acres	Acreage	Acres	Acreage	Acres
Hercules Durum	f	1	09	09	1	1	09	09	ı	1
% of Total	ı	ı	0.1	0.1	1	1	0.1	0.1	1	1
Other Durum	1	ı	100	400	1	ı	£	ı	,	
% of Total	1	1	0.2	0.8	1	1	1	ł	1	,
All Other Wheat	1,894	6,156	11,557	32,744	4,366	13,423	13,455	32,977	4,711	19,753
% of Total	4.3	14.4	22.5	64.1	15.1	46.6	28.5	70.0	11.7	49.7
Oats	7,269	6,899	1,564	369	3,740	1,721	2,561	1,253	3,825	2,184
% of Total	16.5	16.1	3,1	0.7	12.9	0.9	5.4	2.7	9,5	5,5
Selected Oats	1	20	1	520	,	200	ı	350	1	340
% of Total		0.1	ı	1.0	1	0.7	•	0.8	1	0.9
Barley	12,234	24,116	8,650	5,746	4,939	8,931	5,416	4,430	7,713	10,804
% of Total	27.9	56.2	6.91	11.2	17.0	31.0	11.5	9.4	19.1	27.2
Selected Barley	1	700		3,950		1,000	ı	1,050		750
% of lota!	1 4	9.	1 1	7.7	1	3,5	8	2.2	1	1.9
Rye	46	r	170	130	193	425	220	220	415	,
% of Total	0.1	ı	0.3	0.3	0.7	1.5	0.5	0.5	1.0	1
Other Rye	,	1	,	1	1	1	•	1	•	,
% of Total	1	1		ı	1	1		1	a	1
Flaxseed		1	368	612	ı		•	ı		1
% of lota!	ı	1	0.7	7.5	1	1	1	1	1	1
Flaxseed for Crushing	,	ŧ	1	i	•	30		1	,	1
% of Total		1		1	1	0.1	,	•	1	ŧ
Low Erucic Acid Rape	346	346	137	137	250	150	553	440	265	265
% of Total	8.0	0.8	0.3	0.3	8.0	0.5	1.2	6.0	0.7	0.6
Other Rapeseed	2,437	4,628	7,119	6,443	2,453	2,910	5,438	6,307	5,070	5,641
% of lota!	5.5	8.01	13.9	12.6		10.1	11.5	13.4	12.6	14.2
Misc. Crops		ł	7.7	ı	91 0	ı	480	1		ı
% of lotal	1 1	4	0	ı	0.0	ı	1.0	•	1	1
Summer Fallow	14,013	ı	20,280	9	11,518	1	15,951	•	13,807	,
% of lotal	31.9	1 1	39.5		39.8	1	33.7	,	34.2	8
Subtotal	38,239	42,895	50,077	51,111	27,475	28,790	44,134	47,087	35,806	39,737
% of lotal	0./8	0.00	9.76	100.0	95.0	100.0	93.4	100.0	88.8	100.0
Perennial Forage	5,689	1	1,23/	ŧ	1,446	ı	3,121	ı	4,507	ı
TOTAL THERONER ACRES	13.0	1 200	7.4	1 5	0.0	1 0	0.0	1 100	2.11.2	# T
"OTAL IMPROVED ACKES % of Total	100.0	100.0	100.0	100.00	128,82	100 001	100 0	100 0	40,313	39,737
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	)								200	

TABLE 3.9 SEEDED AND QUOTA ACRES BY DELIVERY POINT, 1971-72 (continued)

				Villages (	(concluded)				Towns	
	51 Meota		Shell	Lake	53 Rabbit Lake	ıke	54 Marcelin	lin	35	LI .
	Seeded & Summer Fallow	Quota	Seeded & Summer Fallow	Quota	Seeded & Summer Fallow	Quota	Seeded &	Quota	Seeded & Summer Fallow	Quota
	Acreage	Acres	Acreage	Acres	Acreage	Acres	Acreage	Acres	Acreage	Acres
Hercules Durum	1	٠	,	•		1	40	,	•	ı
% of Total	1	1	,	1		1	0.1	1	•	ı
Other Durum	ı	100	,	1	1	,	100	220		1
% of Total	ı	0.5	•	1	,	ı	0.2	0.4	•	1
All Other Wheat	4,509	14,210	7,282	23,560	7,664	22,200	13,264	39,628	11,416	31,477
% of Total	21.7	68,6	14.1	47.5		32.1	22.6	68,3	12.6	39.7
Oats	408	6	6,275	2,834	5,988	4,871	3,384	515	5,580	3,902
% of Total	2.0	0.1	12.1	5.7	8.6	7.0	5.7	0.9	6.2	4.9
Selected Oats	1	1		197		970	,	20		20
% of Total		ı	,	0.4	ı	7.4		0.1	ŧ	0.1
Barley	2,281	2,075	9,218	19,148	14,818	22,366	11,102	8,780	13,226	25,748
% of Total	10.9	10.0	17.8	38.6	21.4	32.4	18.9	15.2	14.6	32.5
Selected Barley	1	200	1	450	,	3,500	,	2,450		1,500
% of Total	1	2.4	ı	0.9	1	5.1	1	4.2	ı	6.1
Rye	363	100	331	405	837	1,041	768	655	35	20
% of Total	8°.	0.5	9.0	0.8	1.2	1.5	1.3	J.1	0.1	0.1
Other Rye	1	1	1	1	,	1		1	,	1
% of Total		1		1	ı	ı	1	1		1
Flaxseed	165	240	1	ı	ı	1	6	140	1	1
% of Total	0.8	1.2	1	1	ı	ı	0.2	0.2	1	ı
Flaxseed for Crushing	- Gu	1	1	1	1	ì	ı	1	ı	1
% of Total	,	1	1	1	1	ı		1	1	1
Low Erucic Acid Rape	ı	1	1	ı	70	70	8/6	946	1	10
% of Total	1	1	1	1	0.1	0.1	1.7	1.6	1	0.1
Other Rapeseed	3,498	3,467	1,624	3,032	9,473	14,067	4,754	4,634	9,733	16,382
% of Total	16.9	16.7		6.1	13.7	20.4	8.1	8.0	10.7	20.7
Misc. Crops	330	1	4,113	1	26	ı	82	ı	895	1
% of Total	9°1	1	7.9	ı	0.1	ı	0.1	1	1.0	
Summer Fallow	8,080	ı	16,326	ì	26,483	F	18,456	ı	26,135	ı
% of Total	38.9	1	31.5	1	38.2	ł	31.5	1	28.8	ī
Subtotal	19,634	20,701	45,169	49,626	65,389	69,085	53,015	57,988	67,020	79,119
% of Total	94.6	100.0	87.1	100.0	94.4	100.0	90.4	100.0	74.0	100.0
Perennial Forage	1,112	ı	6,703	f	3,915	ı	5,638	1	23,575	ı
% of lotal		1 6	12.9	1 0	5.6	1 1	9.6	1 0	26.0	1 0
IDIAL IMPROVED ACKES % of Total	100.0	100,02	100.0	49,626 100.0	69,304	100.0	100.0	100.0	90,595	100.0
					-					

TABLE 3.9 SEEDED AND QUOTA ACRES BY DELIVERY POINT, 1971-72 (continued)

1					Towns (continued	nued)	1 1			
	30 Le0VIIIe		2/ Borden	List of the second	Öl		59 Radisson	on	0	p00/
	Summer Fallow Acreage	Quota	Summer Fallow Acreage	Quota	Summer Fallow Arreage	Quota	Summer Fallow Acreane	Quota	Summer Fallow	Quota
							260	20100	ייייייייייייייייייייייייייייייייייייייי	751 63
Hercules Durum	1	1	87	32	1	1	445	450	ı	ı
% of Total		ı	0.1	0.1	1	ı	0.7	0.7	,	í
Other Durum	1	1	06.	340	1	å	ŧ	446	1	ē
% of Total	1	1	0.1	0.4	2	1	1	0.7	ı	1
All Other Wheat	3,621	13,485	19,742	62,612	14,436	50,880	14,593	48.502	13,525	48,998
% of Total	9.9	26.6	22.2	71.8	17.6	65.7	22.1	74.2	9 -	42.8
Oats	7,725	6,772	9,465	2,303	8,723	4,036	5,876	1,030	6,488	3,083
% of Total	14.1	13.3	10.6	2.6	10.7	5.2	6.8	1.6	ນໍ້ນ	2.7
Selected Oats	1	310	1	1,405	ı	175	2	480	1	09
% of Total	ı	0.6	1	1.6		0.2	1	0.7	1	0.1
Barley	13,804	22,492	14,174	11,505	7,947	11,738	11,123	7,272	19,950	31,281
% of Total	25.2	44.3	15.9	13.2	9.7	15.1	16.8		17.1	27.3
Selected Barley	1	1,450	1	3,350	1	1,000	ł	2,250	1	300
% of Total	1	2.9	1	3.9	1	1.3	1	3.4	F	0.2
Rye	380	455	701	1	2,089	1,474	471	570	572	770
% of Total	0.7	0.0	0.8	1	2.6	1.9	0.7	0.9	0.5	9.0
Other Rye	1	1	1	535	1	ı	1	ı		87
% of Total	1	ı		9.0		ı	1	ı	8	0.1
Flaxseed	29	335	22	180	ı	ı	4	190	1	1
% of Total	0.1	9.0	0.1	0.5		1	ı	0.3		1
Flaxseed for Crushing	•	ı	•	1	ī	1	1	1	ı	20
% of Total		ı		1	ı	1	1	1	F	0.1
Low Erucic Acid Rape	120	100	1,154	1,154	160	160	800	795	362	432
% of Total	0.2	0.2	1,3	1.3	0.2	0.2	1.2	1,2	0.3	0.4
Other Rapeseed	3,564	5,375	3,736	3,725	7,708	8,040	3,778	3,369	19,573	29,441
% of Total	6.5	10.6	4.2	4.3	9.4	10.4	1.0	5.2	16.8	25.7
Misc. Crops	20	. 1	202	1	322	i	630	1	130	,
% of Total	0.1	1	9.0	1	0.4	ı	5.7	ı	0.1	,
Summer Fallow	15,539	1	31,020	1	56,866	1	22,594	1	42,699	,
% of Total	28.4	ı	34.8	ı	32.8	î	34.1	1	36.6	,
Subtotal	44,840	50,774	80,731	87,141	68,251	77,503	60,310	65,354	103,299	114,502
% of Total	81.9	100.0	90.7	100.0	83.4	100.0	91.2	100.0	88.5	100.0
Perennial Forage	9,932	ı	8,298	1	13,564	1	5,875	ı	13,429	,
% of Total	- 8	1	6.3	1	16.6	i	ထ	ſ	11.5	,
TOTAL IMPROVED ACRES	54,772	50,774	89,029	87,141	81,815	77,503	66,185	65,354	116,728	114,502
% of Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(continued)

TABLE 3.9 SEEDED AND QUOTA ACRES BY DELIVERY POINT, 1971-72 (continued)

	61 Glaslyn	lvn	62 Hafford	7	Towns (concluded)		64 Turtleford	-	7350 79	
NS S		Quota Acres	Seeded & Summer Fallow Acreage	Quota	Seeded & Summer Fallow Acreage	Quota Acres		Quota Acres	Seeded & Summer Fallow Acreage	Quota Acres
Hercules Durum	1	1	1	1	1	ı	,	,	100	100
% of Total	,	1	1	ı	•	,	•	1	0,1	0.1
Other Durum	1	1		20	ŀ	1	1	1	1	09
% of Total	1	1		0.1	i	1	ı	1	,	0.1
All Other Wheat	6,912	18,748	25,989	65,434	718	3,363	11,869	37,807	23,782	74,466
% of Total	11.4	32.6	27.9	71.5	2.2	13.3	15.6	50.8	19.2	63.5
Uats	7,200	4,298	7,850	1,966	4,409	5,282	8,934	3,433	10,212	3,585
% of lotal	6.11	7.5	8.4	2.1	13.6	20.9	11.7	4.6	8.2	3.0
% of Total		0.0	E 8	1.1		2 0		8-0	E J	000
Barley	11,974	21,548	12,391	12,135	404	11.967	13,182	21,361	19.554	19,657
% of Total	19.7	37.4	13.3	13.3	16.7	47.4	17.3	28.7	15.7	16.8
Selected Barley	ı	1,045	1	3,300	•	1	ı	1,000	ı	2,503
% of Total	1 1	∞ ! !		3.6	ı	1	ı	7.3	ı	2.1
Kye	445	707	403	321		ŧ	279	265	2,421	2,742
% of lotal	/.0	7.1	4.0	0.4	ı	ı	0°3	0.3	6. [	2.3
Uther Kye	1	1	8	000	1	ı	ı	1	1	ı
% OI   OCA	1	1 6	i L	- 0	ı	ı	1	ı	1 (	1 (
Flaxseed	f	בר ה ה	52	0.00	F	í	1	ı	40	50
Flaxseed for Crushing			~ 1		1	ı	B :		0.0	
% of Total	1			1 1			3 1	F 1		I (
Low Erucic Acid Rape		t	620	545	. 4	1	000	20	2 689	2 011
% of Total	1	6	0.7	0.6	1		0.1	0.1	2,003	- 10
Other Rapeseed	7,462	10,796	6,364	6,536	1,880	4,193	8,365.	10,457	8,941	11,015
% of Total	12.3	18.8	6.8	7.1	5,0	16.6	11.0	14.1	7.2	9.6
Misc. Crops	40	1	84	1	1	1	135	1	85	ı
% of Total	0.1	1	0.1	f	1	ı	0.2	1	0.1	,
Summer Fallow	17,455	ı	30,780	i	7,917	ı	25,033	ı	33,713	1
% of Total	28.7	1	33.0	1		ı	32.8	1	27.1	1
Subtotal % of Total	51,488	57,538	84,506	91,459	1 m	25,251	67,817	74,443	101,537	117,239
% OT TOTAL	04.0	0.001	7.06	100.0		0.00	0.68	0.00	8.18	100.0
% of Total	9,230		200,8	1 :	12,063	1	8,358	ı	22,623	ı
TOTAL IMPROVED ACRES	60.724	57 538	03 158	01 /150		25 251	76 176	7/ //3		000 711
% of Total	100.0	100.0	100.0	100.0	100.00	100.0	100.0	100.0	100.0	100.0

TABLE 3.9 SEEDED AND QUOTA ACRES BY DELIVERY POINT, 1971-72 (continued)

			Greater Towns	Powns				es
	Soodod &	pood	6/ Shellbrook	700 k	68 Meadow Le	Lake	69 North Battl	attleford
	Summer Fallow Acreage	Quota Acres	Summer Fallow Acreage	Quota		Quota	Summer Fallow Acreage	Quota
Hercules Durum	ı	ı	ı	g			06	
% of Total	1	ı		1			220	5
Other Durum	1	70	1	ı	150	350	259	1.747
% of Total	1	0.1	1	1	0.1	0.1	0.3	2.2
All Other Wheat	10,923	34,084	15,727	55,663	35,805	110.893	11,397	42.396
% of Total	12.0	38.7	12.4	44.9	0,11	38.9	14.5	54.3
Oats	9,515	2,996	8,388	3,008	39,600	19,404	2,731	383
% of Total	10.5	3.4	9.9	2.4	13.1	6.8	3,5	0.5
Selected Uats	1	273	1	191	ŧ	1,228	ŧ	20
% of 10tal		0.3	1 1	7.0		0.4	1	0.1
bariey	25,562	35,550	24,657	34,080	45,510	51,842	7,773	7,742
Spirotal Barley	6.42	4.04	C.8.	1 250	1.0	7.81	מי	D 00
% of Total		7,000	1 1	00261	1 1	10,200	1 :	2,000
Rye	684	715	2,201	3,813	2.405	3,723	624	570
% of Total	0.7	0.8	1.7	3.0	8.0	1.3	0.8	0,7
Other Rye	1	1	1	ı	1	1		1
% of Total	ı		1	1	1	ı	1	1
r laxseed	ı	1	1	1	40	100	122	353
Flaveped for Cruching		ı	ı	ı	0.0	0.0	0	0.5
% of Total	1 1	1		1			8	ı
low Frucic Acid Rane	330	090	702	1 VV		1 C	1 0 1	1 705
% of Total	0.4	0.3	9.0	0.7		0.1	2,84	1,123
Other Rapeseed	5,661	9,323	16,989	25,154	54,034	87,107	18,203	21,100
% of Total	6.2	10.6	13.4	20.3	17.9	30.5	23.0	27.0
Misc. Crops	254	1	86	ı	802	1	1	,
% of lotal	0.000	1	0.1	ı	0.2	1	1 6	1
Summer rallow	29,246	ı	42,936	ř	/4,/31	ī	30,891	
% UT IUtal	52.3 70 75	120 00	93.55 P. 25.9	124 002	24.8	700 100	39.2	20 06
% of Total	87,3	100.0	00000	100.0	84.0	100.00	93.8	100.0
Perennial Forage	11,484	1	14,970	1	48,104	1	4,912	1
% of Total	12.7	1	11.8	1	16.0	1	6.2	ı
10TAL IMPROVED ACRES % of Total	90,659	88,071 100.0	126,668	124,003	301,181	284,897	78,844	78,066

TABLE 3:9 SEEDED AND QUOTA ACRES BY DELIVERY POINT, 1971-72 (concluded)

	0 0000			200
	Summer Fallow Acreage	Quota Acres	Summer Fallow Acreage	Quota Acres
Hercules Durum	1,182	1,002	622,939	590,476
% of lotal	0.0	0.0	m.	.3
Other Durum	1,007	6,418	1,286,793	3,067,045
% of Total	0.1	8°0	2.8	9.9
All Other Wheat	438,864	1,388,342	11,722,928	30,679,714
% of Total	15.7	51.2	25.0	66.3
Oats	239,105	116,954	2,256,816	721,011
% of Total	യ്	4.3	4.8	1.6
Selected Oats	ı	12,060	ı	199,139
% of Total	ı	0.4	ı	0.4
Barley	462,783	605,293	5,911,806	4,516,871
% of Total	16.5	22.4	12.6	9.7
Selected Barley	1	75,803	ı	1,687,420
% of Total	3	2.8	1	3.6
Rye	24,236	27,758	553,540	518,274
% of Total	0.8	1.0	7.2	
Other Rye	1	852	1	41,442
% of Total	1	0.1	1	0.1
Flaxseed	1,634	4,683	943,274	999,292
% of Total	0.1	0.2	2.0	2.2
Flaxseed for Crushing	ı	285	1	29,883
% of Total	ı	0.0	1	0.1
Low Erucic Acid Rape	22,084	20,779	342,957	314,930
% of Total	0.8	0.8	0.7	0.7
Other Rapeseed	332,427	445,878	2,491,714	2,936,822
% of Total	11.9	16.5	ഹം	6.3
Misc. Crops	11,235	ŧ	329,088	1
% of Total	0.4	ı	0.7	ı
Summer Fallow	924,997	ŧ	17,363,690	1
% of Total	33.0		37.0	f
Subtotal	2,459,554	2,706,107	43,825,545	46,302,319
% of Total	87.9	100.0	93.4	100.0
Perennial Forage	339,103	1	3,078,976	1
% of Total	12.1	1	9.9	1
TOTAL ACRES	2,798,657	2,706,107	46,904,521	46,302,319
	4 4 8			

Source: Canadian Wheat Board, Winnipeg.

#### Acres Devoted to Canadian Wheat Board Grains

An accepted division of crops separates wheat, durum wheat, oats and barley, the Wheat Board grains, from other cereals and oilseeds. Tables 3.10A and 3.10B indicate the extent to which farmers in the hinterland of each delivery point rely on the Wheat Board to market their crops. For grains sold through the Board, these tables present a time series of seeded acres, 1962-63 to 1970-71, and quota acres, 1971-72. Percentages of seeded or quota acres to total specified or quota acres are also given.

From 1962-63 to 1969-70, the percentages of seeded acres in Board grains were fairly uniform. For the study area, the percentages of seeded acres to total specified acres ranged from a low of 52.1 to a high of 59.5 (Table 3.10A).

In 1970-71, as Table 3.10B shows, the acreage in Board grains dropped to 34.4 percent of total acres, reflecting the decline in seeded acres that year. In contrast, most percentages of seeded acres at delivery points in 1971-72 ranged from 80.0 to 90.0. These percentages, as well as the average for the entire study area, 81.5 percent, were much higher than the corresponding figures for any previous year. The data for quota acres in Table 3.10B is, of course, not fully comparable with the data for specified acres in Table 3.10A.

TABLE 3.10A NUMBER AND PERCENT OF SPECIFIED ACRES DEVOTED TO CANADIAN WHEAT BOARD GRAINS<sup>a</sup>, 1962-63 TO 1969-70

Marchell Consenting   Marchell Consent   Marchell	Delivery Point	1962-63 <sup>b</sup>	e3 <sub>p</sub>	1963-6	54	1964-65	35	1965-66	99	1966-67	.67	1967-	-68	1968-69	69-	1969-7	-70
Cheeves Cheeves S. 589 40.1 C. Crossd A. 2. 2. 194 48.1 C. Crossd A. 2. 229 48.3 3,727 55.0 3,690 Dishermenth S. 684 53.6 6.60 52.4 4.842 64.7 5.754 48.5 G. Crossd A. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	Cm211 +0	acres	%	U	%	U	%	U	89	acres	89	U	%	U	%	acres	%
9,025         97.3         2,931         64.48         42.426         47.2         2,194         48.1         1,075         48.3         2,929         48.3         3,727         55.0         3,690           6,889         22.6         6,880         62.4         4,800         64.7         6.20         44.5         47.8         5.00         49.7         6.00         49.7         49.4         49.4         49.6	Hartwell Common	-k -l		* 1		Closed		4		ŗ							
\$\begin{array}{c} \text{5.66} & \text{5.7} & \text{5.60} & \text{5.7} & \text{5.70} & \text		3.021	57 3	2 931	5.4 R		47.2	2 194	18 1	2 077		2 020		2 727	T.	3 690	0
6.881 82.0 6.938 511.2 6.938 41.6 6.348 41.8 10.0000 42.9 41.8 10.0000 42.9 41.8 10.0000 42.9 11.8 10.0000 42.9 11.8 11.8 11.8 11.8 11.8 11.8 11.8 11		5,864	53.6	5,640	52.4	• •	49.1	4,812	48.5	Closed		6,363		0,127		06060	'n
7,709 60.6 17,338 68.9 18,459 63.6 17,319 61.9 18,323 62.8 17,764 64.2 16,540 62.7 10,623 17,898 60.5 17,338 68.9 18,459 63.6 17,319 61.9 18,323 62.8 17,764 64.2 16,540 62.7 10,623 17,898 60.5 17,338 68.9 18,459 63.6 17,319 61.9 18,323 62.8 17,764 64.2 16,540 62.7 10,623 17,898 60.5 17,326 68.9 18,499 63.6 17,319 61.9 18,329 63.8 17,764 64.2 16,540 62.7 10,623 65.8 17,419 64.8 10,242 65.8 19,339 65.2 19,808 63.9 19,410 78,410		6,881	52.0	6,983	51.2	, 6	48.7	3,524	47.8	2,907	47.9	Closed					
7,707 49.4 7,612 46.6 7,256 45.8 4,908 44.1 14,388 43.7 15,244 48.2 5,003 4,698 60.5 17,398 60.5 1,338 58.9 18,469 63.6 17,319 64.5 17,898 60.5 17,898 60.5 17,898 60.5 17,898 60.5 17,898 60.5 17,898 60.5 17,898 60.5 17,898 60.5 17,898 60.5 17,898 60.5 17,898 60.5 17,898 60.5 17,899		5,589	40.1	6,022	42.2		44.0	6,285	41.6	5,445	41.7	Closed					
1,586 60.5 17,338 68.9 18,48 60.5 17,319 61.9 18,333 62.8 17,774 64.2 16,940 62.7 10,623 6.94 62.2 1,496 60.5 17,319 61.9 18,333 62.8 17,774 64.2 16,940 62.7 10,623 6.947 61.3 11,376 68.8 10.242 65.8 5,665 64.8 5,100 63.9 5,059 64.8 65.4 65.4 17 65.7 4,581 13,055 68.5 14,089 63.0 15,929 63.9 1,329 68.8 14,091 65.8 11,641 15,005 68.5 14,089 65.7 16,489 62.7 16,489		7,707	49.4	7,612	46.6	•	45.8	4,908	44.5	4,785	47.1	4,398	43.7	5,244	48.2	5,003	50.2
9,564 62.2   1,376 80.6   6,534 66.6   6,437 68.7   6,495 94.8   7,495 65.7   6,495 94.8   7,495 65.7   6,495 94.8   7,495 95.6   7,495 94.8   7,495		868,71	60.5	17,338	58.9	90	63.6	17,319	6.19	18,323	62.8	17,764	64.2	16,540	62.7	10,623	54.1
4,573 65.1 11,376 86.8 10,242 65.8 5,166 51.8 1,151 42.4 133 43.4 132.9 65.8 1.4 1,151 42.4 138.8 1.5 1,151 42.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1		2 651	60 0	: 010		. LVC 3	2 22	Closed F A27		E 044	N 12	770	0 110	+		+	
1,000 86.5 81.0 4,000 86.5 81.0 6,000 87.1 1		400,0	55.7	11 376		10,241	00.00 20.00	704.0		0,044	67.0	0,344	00.0		50.7	0 00 0	0 77
1,526 56.2		070,0	51.4	F 622		7 7 7 7	27.0	7,002		7,000	0.10	7,039	53.7	en .	55.7	0,000	70 7
15,055 88.5 14,866 63.0 15,395 62.7 16,485 72.1 15,38 69.3 17,295 66.8 14,091 56.8 11,641 15,005 68.1 16,287 61.3 16,310 60.7 16,485 62.5 16,287 61.2 16,886 63.2 6.30 17,329 68.5 17,330 65.8 7,149 64.6 6,980 63.4 6,529 61.2 16,886 63.2 7,390 65.8 7,149 64.6 6,980 63.4 6,529 64.0 7,466 63.2 6,390 63.4 6,529 64.0 7,466 63.2 6,390 63.4 6,529 64.0 7,466 63.2 6,390 63.4 6,529 64.0 7,466 63.2 6,390 63.4 6,520 63.2 6,390 62.2 6,390 63.4 6,290 67.1 1,390 63.2 6,390 62.2 6,390 63.4 6,290 67.1 1,390 63.2 6,390		3,626	56.2	4,120		2,969	49.8	1,621		1,13	42.4	1,383	48.7	•		*	100
15,606 58.1   16,287 61.3   16,488 62.5   15,227 61.2   16,886 63.6   15,490 69.7   12,553 7,920 68.5   7,930 65.8   7,149 64.6   6,920 63.6   6,529 64.0   7,456 63.2   6,330 65.8   7,149 64.6   6,920 63.4   6,529 64.0   7,456 63.2   6,330 65.8   7,149 64.6   6,920 63.4   6,529 64.0   7,456 63.2   6,330 65.8   7,149 64.6   6,920 63.4   6,529 64.0   7,456 63.2   6,330 62.7   6,9		13,055	58.5	14,868		15,395	62.7	16,485		15,438	69.3	, /	68.8	14,091	56.	11,641	51.3
10,028 56.7 9,288 54.3 8,271 52.3 9,278 56.5 8,226 55.4 6,863 46.6 5,360 49.2 4,893 7,929 68.5 7,930 65.8 7,149 64.6 6,990 63.4 6,529 57.1 6,929 64.0 7,456 63.2 6,330 10,520 62.3 6,996 62.7 6,996 62		15,606	58.1	16,287		16,810	60.7	16,458		16,927	61.2	6,	63.6	15,490	59.	12,503	51.1
4,573         62.9         4,573         62.9         6,29         6.7         4,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,486         6.3         6,597         6.5         6.5         6.5         6.5         6.4         6.4         6.2         6,596         6.2         6,506         6.2         6,486         6.3         6,486         6.3         6,486         6.2         6,486         6.2         6,500         6.2         6,486         6.2         6,500         6.2         6,486         6.2         6,500         6.2         6,486         6.2         6,500         6.2         6,486         6.2         6,500         6.2         6,486         6.2         6,500         6.2         6,486         6.2         6,500         6.2         6,486         6.2         6,500         6.2         6,486         6.2         6,500         6.2         6,50		10,028	56.7	9,288		8,271	52.3	9,278		8,226	55.4	6,863	46.6	5,360	49.	4,893	48.6
4,573         62.9         4,236         61.5         4,706         61.9         4,655         68.3         5,445         56.3         6,868         61.9         66.2         6,996         62.5         6,590         62.5         6,897         62.5         6,590         66.2         6,996         66.2         66.2         66.2         66.2         66.2         66.2         66.2         66.2         66.2         66.2         66.		7,929	68.5	7,930		7,149	9.49	086,9		6,529	57.1	6,929	64.0	7,456	63.	6,330	60.4
4,573 62.9 4,236 61.5 4,706 61.9 4,033 56.7 4,486 63.8 5,445 56.3 6,888 61.9 5,469 56.3 61.9 6.898 62.7 6,998 62.2 5,897 52.5 55.0 8.2 9,961 62.3 11,792 60.6 9,866 50.2 19,783 53.5 20,749 54.1 22,035 55.9 23,444 56.2 5.6 6.8 8.2 9,961 62.3 11,792 60.5 1,898 51.9 1,792 60.5 17,827 51.0 17,815 52.0 17,815 5	Hamlets																
19,520 62.3 6,898 62.7 6,596 62.2 5,897 62.5 6,550 68.2 3,961 62.3 11,792 60.6 9,885 58.	18 Hatherleigh	4,573		4,236	61.5	4,706	6.19	4,053	56.	4,486	63.8	5,445	56.3	6,858	61.		58,6
1,463   3.5.   2.4,49   3.5.   2.4,605   3.5.   3	19 Redfield	10,520		6,898		966,996	62.2	5,897	62.	6,550	68.2	9,961	62.3	11,792	60.		58.0
16,387 51.9   16,974 52.5   16,908 51.0   17,315 52.9   16,535 51.5   17,503 59.5   16,535 50.5   16,535 50.5   16,535 50.5   16,535 50.5   16,535 60.7   17,237 61.0   17,315 52.9   16,535 60.7   17,237 61.0   17,315 52.9   16,535 60.5   17,551 60.3   17,551 60.3   19,755 55.5   19,808 60.5   17,818 61.4   6,739 60.0   17,315 62.9   17,595 63.2   16,535 60.3   16,535 60.3   16,539 60.7   12,386 51.0   17,315 61.4   6,739 60.0   6,279 61.1   7,796 63.2   10,100 57.1   12,386 58.6   11,525 53.3   16,535 60.2   5,803 57.9   5,105 65.2   10,409 62.9   10,409		6 7/03		7 000		7 562	25.0	23,444	2/	109,52	58.5	24,865	5/.0	716,87	53.		20.8
16,351 59.3   16,539 60.7   17,237 61.0   18,048 61.3   17,674 63.1   16,601 60.5   17,551 60.3   15,755 60.3   16,531 60.3   16,531 60.3   16,535 60.7   17,237 61.0   11,857 57.6   10,811 59.2   12,138 58.4   12,156 60.3   15,755 60.3   16,755 60.3		16 887		16 074		700,7	00.00	3,400	04. E2	76,900	54.0	2,813	2000		60 0	15 796	0 31
10,710 60.6 11,818 61.0 10,918 60.1 11,857 57.6 10,811 59.2 12,138 58.4 12,816 56.9 19,705 58. 8,949 61.3 7,866 60.3 2,804 61.3 7,866 60.3 5,556 62.2 5,803 57.9 5,436 57.2 6,252 66.7 5,986 53.7 12,586 58.6 11,252 53. 8,990 62.9 11,252 53. 8,990 62.9 10,905 59.9 53.9 9,610 56.6 8,356 52.1 5,868 46.8 7,532 54.3 7,120 51. 8,990 62.9 10,905 59.9 53.9 9,610 56.6 8,356 52.1 5,868 46.8 7,532 54.3 7,120 51. 8,990 62.9 10,055 59.8 7,933 61.8 7,721 57. 7,140 54.1 7,075 56.5 7,120 51. 8,990 62.9 10,055 59.8 7,933 61.8 7,21 57. 7,140 54.1 7,075 56.5 8. 40. 8,490 62.9 10,055 56.5 8. 8,400 62.9 10,055 56.5 8. 8,400 62.9 10,055 56.5 10,055 56.5 10,055 56.5 10,055 56.5 10,055 56.5 10,055 56.5 10,055 56.5 10,055 56.5 10,055 56.5 10,055 56.5 10,055 56.5 10,055 56.5 10,055 56.5 10		16,351		16,539		17,237	0.19	18,048	61.	17,674	63.1	16,601	60.5		60.3	15,676	55.1
9,849 61.3 9,694 63.4 9,270 56.9 9,067 60.4 9,458 57.0 10,100 57.1 12,586 58.6 11,252 53.   4,856 60.2 7,186 61.4 6,739 60.0 6,579 61.1 7,796 63.2 8,016 58.2 10,409 62.9 10,498 55.   5,586 61.4 6,739 60.0 6,579 61.1 7,796 63.2 8,016 58.2 10,409 62.9 10,498 55.   9,989 58.4 9,055 55.0 9,299 53.9 9,610 56.6 8,356 52.1 5,868 46.8 7,532 54.3 7,120 51.   9,989 58.4 9,065 59.0 10,065 59.8 7,793 61.8 7,714 54.1 7,075 56.5 7,714 56.7 7,075 56.5 7,714 56.7 7,075 56.5 7,714 56.7 7,075 56.5 7,714 56.7 7,075 56.5 7,714 56.7 7,075 56.5 7,714 56.7 7,714 56.7 7,075 56.5 7,714 56.7		10,710		11,818		10,918	60.1	11,857	57.	10,811	59.2	12,138	58.4		56.9	19,705	58.8
8,076 63.2 7,186 61.4 6,739 60.0 6,279 61.1 7,796 63.2 8,016 58.2 10,409 62.9 10,498 55. 4,866 60.3 5,556 60.3 5,556 60.3 5,803 57.9 5,436 57.2 6,255 56.7 5,888 46.8 7,323 54.7 7,140 54.1 7,075 56.5 7,880 55. 9,298 60.0 10,055 59.8 7,933 61.8 7,321 57.7 7,140 54.1 7,075 56.5 7,880 55. 9,298 60.0 10,055 59.8 7,933 61.8 7,321 57.7 7,140 54.1 7,075 56.5 7.8 7,20 51.9 19,680 52.6 20,089 54.1 20,004 54.1 19,636 51.2 29,341 59.9 30,514 60.0 31,342 60.2 29,441 55.8 25,479 61.2 29,341 59.9 30,514 60.0 31,949 60.2 29,466 57.5 52.8 44.1 55.8 25,479 51.2 29,441 55.8 25,479 51.2 29,441 55.8 25,479 51.2 29,441 55.8 25,479 51.2 29,441 55.8 25,479 51.2 29,441 55.8 25,479 51.2 29,441 55.8 25,479 51.2 29,441 55.8 25,479 51.2 29,441 59.9 30,514 60.0 31,949 63.5 51.2 29,446 51.2 29,441 59.9 30,514 60.0 31,949 63.5 51.2 29,441 55.8 25,479 51.1 11,624 58.6 13,029 64.1 13,593 67.2 12,084 60.6 11,789 59.5 10,628 56.1 12,639 60.4 12,814 61.5 11,654 55.9 13,029 64.1 13,593 67.2 12,084 60.6 11,789 59.5 10,628 59.1 12,689 60.4 12,814 61.5 11,654 55.9 13,048 58.9 11,63.7 8,524 59.6 9,098 59.1 10,227 46.7 9,538 45.9 9,655 46.1 9,588 44.7 9,759 45.1 10,857 45.5 8,927 46.4 8,073 44.		9,849		6,694		9,270	6.99	290,6	.09	9,458	57.0	10,100	57.1		58.6	11,252	53.9
4,856         60.3         5,556         62.2         5,836         57.9         5,436         57.2         6,252         56.7         5,986         53.7         8,490         62.4         7,880         55.7         5,886         46.8         7,532         54.3         7,120         51.2         51.8         46.8         7,532         54.3         7,120         51.2         51.8         46.8         7,532         54.3         7,120         51.2         51.8         56.6         52.5         56.6         32,546         51.9         56.4         8.3         56.6         22,441         55.8         62.2         54.4         55.8         62.2         54.4         55.8         62.2         54.4         55.8         62.2         54.4         56.8         52.549         57.8         52.549         48.8         52.549         55.8         52.549         57.8         52.549         48.8         52.549         57.8         52.549         57.8         52.549         57.8         52.549         48.8         57.5         52.698         58.6         52.441         55.8         51.9         52.549         48.8         51.3         52.698         58.6         52.441         55.8         51.8         51.8         <		8,076		7,186		6,739	0.09	6,279	. [9	7,796	63.2	8,016	58.2		62.9	10,498	55.5
9,989       58.4       9,089       58.4       9,089       58.4       7,32       54.1       7,32       54.3       7,140       54.1       7,075       56.5       54.3       7,120       51.2       54.1       7,075       56.5       54.3       7,140       54.1       7,075       56.5       56.5       56.5       56.5       56.5       56.5       57.2       7,140       54.1       7,075       56.5       56.5       57.3       7,140       54.1       7,075       56.5       56.5       57.3       57.4       67.5       56.5       57.5       52.549       48.       56.5       56.4       86.5       57.5       52.549       48.       56.5       57.5       52.549       56.5       57.5       52.549       48.       57.5       52.441       57.5       56.5       57.5       52.341       59.9       30.514       60.0       31,342       60.2       22,446       57.5       57.5       56.5       60.1       10,526       64.1       13,029       64.1       13,593       67.2       12,084       60.6       11,789       59.5       10,628       59.5       10,628       59.5       10,628       59.5       10,628       50.6       10,628       50.6       10,628<		4,856		5,556		5,803	57.9	5,436	57.	6,252	56.7	5,986	53.7		62.4	7,880	55.7
19,680 52.6   20,089 57.8   20,004 57.8   20,005 51.2   20,045 51.9   22,441 59.9   23,446 57.9   24,447 57.9   24,448 57.9   24,447 57.9   24,448 57.9   24,447 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9   24,448 57.9		9,00		9,055		9,299	53.0	9,610	56.	8,356	52.1	5,868	46.8		54.3	7,120	51.1
26,960 58.6 29,065 61.2 29,375 50.0 22,441 50.0 25,446 57.5 23,745 91.9 22,549 52.1 26,940 58.6 57.8 20,065 61.2 29,341 50.0 25,195 60.2 29,466 57.5 23,745 91.9 52.1 12,056 64.3 11,624 58.6 13,029 64.1 13,593 67.2 12,084 60.6 11,789 59.5 10,628 56.1 12,227 64.2 13,134 66.8 10,536 61.5 9,805 64.0 9,111 63.7 8,524 59.6 9,098 59.1 12,589 60.4 12,814 61.5 11,654 55.9 13,048 58.9 13,206 58.5 11,529 54.4 13,535 61.8 12,689 60.4 16,574 55.5 10,628 56.1 17,614 59.2 18,028 59.4 16,104 56.3 16,321 55.3 17,263 58.1 17,614 59.2 18,028 59.4 16,104 56.3 16,321 55.3 17,263 58.1 17,614 59.2 18,028 59.4 16,104 56.3 16,321 55.3 17,263 58.1 17,614 59.2 18,028 59.4 16,104 56.3 17,430 50.1 10,227 46.7 9,538 45.9 9,655 46.1 9,588 44.7 9,759 45.1 10,857 45.5 51.8 11,250 56.1 12,630 60.3 11,260 56.1 12,613 59.9 12,744 59.5 11,155 58.7 10,929 56.1 11,551 54.1		10,921		3,238		660,01	ν	7,933	0 5	1,35.	27.7	7,140	54.1		20.5	K C C C	7
24,727         59.8         25,912         60.6         26,657         62.8         29,806         64.8         30,861         64.1         31,909         63.5         30,762         60.5         25,499         52           11,220         60.1         12,656         64.3         11,624         58.6         13,029         64.1         31,909         63.5         30,762         60.5         25,499         52           12,227         60.1         12,656         64.2         11,624         58.6         13,029         64.1         13,593         67.2         12,084         60.6         11,789         59.5         10,628         56.           12,689         60.4         12,797         64.2         13,134         66.8         10,536         61.5         9,805         64.0         9,111         63.7         8,524         59.6         10,628         59.4         11,789         59.5         10,628         59.4         11,789         59.5         14,430         50.9         10,628         54.4         13,535         61.8         12,622         54.4         13,535         61.8         12,622         54.4         13,535         61.8         12,732         64.1         9,759         44.7         <		26,940		28,490		30,004	61.7	29,341	200	30,514	200.0	31 342	22.00		27.7	23,778	2,7
11,220 60.1 12,656 64.3 11,624 58.6 13,029 64.1 13,593 67.2 12,084 60.6 11,789 59.5 10,628 56.1 12,327 61.7 12,797 64.2 13,134 66.8 10,536 61.5 9,805 64.0 9,111 63.7 8,524 59.6 9,098 59.5 12,689 60.4 12,814 61.5 11,654 55.9 13,048 58.9 13,206 58.5 11,529 54.4 13,535 61.8 12,622 54.1 16,574 55.5 16,410 56.3 16,321 55.3 17,263 58.1 17,614 59.2 18,028 59.4 16,104 56.4 14,430 50.1 10,227 46.7 9,538 45.9 9,655 46.1 9,588 44.7 9,759 45.1 10,857 45.5 8,927 46.4 8,073 44.  26,417 63.3 29,615 64.9 27,335 61.9 27,119 62.8 27,720 67.3 14,365 60.6 12,630 60.3 11,260 56.1 12,311 58.1 12,413 59.9 12,744 59.5 11,155 58.7 10,929 56.1 11,551 54.1 11,5		24,727		25,912		26,657	62.8	29,806	64	30,861	64.1	31,909	63.5		60.5	25,949	52.6
12,327 61.7 12,797 64.2 13,134 66.8 10,536 61.5 9,805 64.0 9,111 63.7 8,524 59.6 9,098 59. 12,689 60.4 12,814 61.5 11,654 55.9 13,048 58.9 13,206 58.5 11,529 54.4 13,535 61.8 12,622 54. 16,574 55.5 16,410 56.3 16,321 55.3 17,263 58.1 17,614 59.2 18,028 59.4 16,104 56.4 14,430 50. 10,227 46.7 9,538 45.9 9,655 46.1 9,588 44.7 9,759 45.1 10,857 45.5 8,927 46.4 8,073 44. 26,417 63.3 29,615 64.9 27,335 61.9 27,119 62.8 27,720 67.3 14,365 60.6 12,630 60.3 11,260 56. 12,311 58.1 12,413 59.9 12,744 59.5 11,155 58.7 10,929 56.1 11,551 54.1 11,076 58.1 8,260 53. 33,042 52.2 35,054 51.2 39,706 55.3 39,763 53.4 42,855 54.8 42,273 51.7 45,095 51.5 40,985 47.		11,220		12,656		11,624	58.6	13,029	64	13,593	67.2	12,084	9.09		59.5	10,628	56.2
12,689     60.4     12,814     61.5     11,654     55.9     13,048     58.9     13,206     58.5     11,529     54.4     13,535     61.8     12,622     54.       16,574     55.5     16,410     56.3     16,321     55.3     17,263     58.1     17,614     59.2     18,028     59.4     16,104     56.4     14,430     50.       10,227     46.7     9,538     45.1     9,558     44.7     9,759     45.1     10,857     45.5     8,927     46.4     8,073     44.       26,417     63.3     29,615     64.9     27,335     61.9     27,119     62.8     27,720     67.3     14,365     60.6     12,630     60.3     11,260     56.       12,311     58.1     12,413     59.9     12,744     59.5     11,155     58.7     10,929     56.1     11,576     58.1     8,260     51.5     40,985     47.       33,042     52.2     35,054     51.2     39,765     53.4     42,855     54.8     42,273     51.7     45,095     51.5     40,985     47.		12,327		12,797		13,134	8.99	10,536	61	9,805	64.0	9,111	63.7		59.6	9,098	59.7
16,574 55.5 16,410 56.3 16,321 55.3 17,263 58.1 17,614 59.2 18,028 59.4 16,104 56.4 14,430 50. 10,227 46.7 9,538 45.9 9,655 46.1 9,588 44.7 9,759 45.1 10,857 45.5 8,927 46.4 8,073 44.  26,417 63.3 29,615 64.9 27,335 61.9 27,119 62.8 27,720 67.3 14,365 60.6 12,630 60.3 11,260 56. 12,311 58.1 12,413 59.9 12,744 59.5 11,155 58.7 10,929 56.1 11,551 54.1 11,076 58.1 8,260 53. 33,042 52.2 35,054 51.2 39,706 55.3 39,763 53.4 42,855 54.8 42,273 51.7 45,095 51.5 40,985 47.		12,689		12,814		11,654	55.9	13,048	800	13,206	58.5	11,529	54.4		61.8	12,622	54.6
10,227 46.7 9,538 45.9 9,655 46.1 9,588 44.7 9,759 45.1 10,857 45.5 8,927 46.4 8,073 44.  26,417 63.3 29,615 64.9 27,335 61.9 27,119 62.8 27,720 67.3 14,365 60.6 12,630 60.3 11,260 56. 12,311 58.1 12,413 59.9 12,744 59.5 11,155 58.7 10,929 56.1 11,551 54.1 11,076 58.1 8,260 53. 33,042 52.2 35,054 51.2 39,706 55.3 39,763 53.4 42,855 54.8 42,273 51.7 45,095 51.5 40,985 47.		16,574		16,410		16,321	55.3	17,263	58.	17,614	59.2	18,028	59.4		56.4	14,430	50.8
26,417 63.3 29,615 64.9 27,335 61.9 27,119 62.8 27,720 67.3 14,365 60.6 12,630 60.3 11,260 56. 12,311 58.1 12,413 59.9 12,744 59.5 11,155 58.7 10,929 56.1 11,551 54.1 11,076 58.1 8,260 53. 33,042 52.2 35,054 51.2 39,706 55.3 39,763 53.4 42,855 54.8 42,273 51.7 45,095 51.5 40,985 47.			46.7	9,538		9,655	46.1	9,588	44.	6,759	45.1	10,857	45.5		46.4	8,073	44.3
26,417 63.3 29,615 64.9 27,335 61.9 27,119 62.8 27,720 67.3 14,365 60.6 12,630 60.3 11,260 56. 12,311 58.1 12,413 59.9 12,744 59.5 11,155 58.7 10,929 56.1 11,551 54.1 11,076 58.1 8,260 53. 33,042 52.2 35,054 51.2 39,706 55.3 39,763 53.4 42,855 54.8 42,273 51.7 45,095 51.5 40,985 47.	Villages																
12,311 58.1 12,413 59.9 12,744 59.5 11,155 58.7 10,929 56.1 11,551 54.1 11,076 58.1 8,260 53. 33,042 52.2 35,054 51.2 39,706 55.3 39,763 53.4 42,855 54.8 42,273 51.7 45,095 51.5 40,985 47.	38 Whitkow	26,417		29,615	64.	,33	61.9	_		27,720	67.3	14,365	9.09	63	60.3	- 61	6.
10,000 1.10 10,000 1.10 11,000 1.10 1.10	39 Mullingar	33,042		12,413	59.	,74	59.5	15		10,929	56.1 20.2	11,551	54.1	00	58.1	60	3
	100000	7,00		600000000000000000000000000000000000000	5	, ,		)		10000		14,24,0		0		65	

TABLE 3.10A NUMBER AND PERCENT OF SPECIFIED ACRES DEVOTED TO CANADIAN WHEAT BOARD GRAINS<sup>a</sup>, 1962-63 TO 1969-70

Delivery Point	1962	1962-63 <sup>b</sup>	1963-	64	1964-	-65	1965-(	99-	1966-	-67	1967-	89	1968-(	69-	1969-70	0
	acres	96	acres	%	acres	96	acres	%	acres	%	acres	%	acres	%	acres	60
	21,494		19,134	45.0	20,409	46.0	20,390	47.1	19,548	46.3	16,771	41.3	20,971	50.7	18,894	47.1
43 Livelong 44 Vawn	15,410			52.5	15,449		14,623		14,177	52.6	14,460	53.2	16,743		14,536	
	31,163			65.2	34,027		31,166		31,134	64.8	29,804	62.6	31,069		28,394	
46 Medstead	13,126			57.4	14,891		17,721		16,488	54.1	18,050	57.2	23,133		23,468	
	13,559		13,863	58.6	13,539		15,858		15,521	57.6	16,413	58.9	16.161		15.242	
	23,502			57.9	24,016		25,393		26,129	61.4	25,246	58.8	24,717		23,133	
51 Meota	12,558		12,073	52.6 53.5	11,704		110,12		19,249	49.8	19,586	51.0	22,033		19,477	
	21,723	51.1		50.1	21,874		22,360		21,780	49.2	21,549	49.3	22,502		24,804	
53 Kabbit Lake 54 Marcelin	34,158			58.6 58.6	15,198 35,216		17,266 35,832		17,118 36,593	54.6 62.3	18,245 35,808	50.0 62.0	26,509 34,630		27,803 32,856	
Towns																
ebden	23,526			50.2	31,394	50.7	31,582	49.7	32,997	49.7	39,010	47.1	41,848	47.4	39,994	
57 Borden	50,693			20.0	49,784	59.7	50,391	59.0	51 895	55.6	26,135	58.2 58.7	24,192	52.6	24,962	
	27,535			48.7	28,191	47.2	27,427	47.0	32,219	47.8	32,828	49.7	35,920	50.9	34,890	
	37,582			59.7	38,484	28.8	37,997	57.6	38,857	60.1	38,383	57.7	37,032	56.8	34,378	
61 Glaslyn	46,43/	58.5	49,023	52.2	50,811	53.3	50,438	53.8	52,257	53.7 57.8	50,441	52.0	30,770	51.7	48,292	
	51,370			62.6	53,807	67.1	50,523	64.1	50,660	64.5	52,114	64.0	55,153	62.7	50,268	
	8,727			45.1	8,560	43.9	8,773	44.2	8,735	40.1	9,004	39.5	10,310	40.1	12,010	
65 Leask	54,148	51.5	56,492	50.6	55,365	50.4	55,985	50.3	58,776	51.8	34,098 59,420	52.1	37,009 58,736	55.2	36,977 58,902	53.9
Greater Towns																
66 Spiritwood 67 Shellbrook	56,468	52.7	r	50.6	43,034 55,668	57.7	43,603	59.0	43,466	53.5	44,490	55.9	55,578	57.3	48,394	57.4 45.8
DO MEADOW LAKE	140,/49		130,043	4.20	132,095	7.80	709,011	9.76	111,104		110,465	54.5	142,/84		139,633	- 09
Cities 69 North Battleford	31,007	54.6	30,073	55.1	29,779	55.9	31,835	57.7	36,772	2.09	35,320	57.1	34,703	54.1	36,078	50.4
Study Area Total	1,389,029	56.7	1,405,936	59.5	1,411,938	56.1	1,393,148	56.5	1,398,547	56.5	1,385,041	55.1	1,464,804	56.2	1,377,790	52.1

\*Storage only.

 $^{\rm a}{\rm Wheat}$  Board Grains are wheat, durum, oats and barley.  $^{\rm b}{\rm Durum}$  excluded from Wheat Board Grains in 1962-63.

Source: Canadian Wheat Board, Winnipeg.

TABLE 3.10B NUMBER AND PERCENT OF QUOTA ACRES DEVOTED TO CANADIAN WHEAT BOARD GRAINS, 1970-71 AND 1971-72

	1970-71 <sup>a</sup>		1971-72 <sup>b</sup>	
	Seeded	<i>a</i>	Assigned	% of Total
Delivery Point	<u>Acres</u>	Percent <sup>d</sup>	Quota Acres <sup>e</sup>	Quota Acres
Too Small to Classify				
1 Hartwell	Closed	_		
2 Cameo	Closed			_
3 Bournemouth	Closed	_	_	_
4 Dulwich	Closed	_	_	_
5 Cleeves	Closed	esa	_	400
6 Ormeaux	Closed	_	_	_
7 Ordale	Closed	***	-	_
8 Tallman	5,460	32.2	14,390	84.7
9 Kilwinning	Closed	- Ampl	_	_
10 Redberry	Storage	only	Closed	
11 Scentgrass	4,776	29.4	12,632	72.7
12 Polwarth	2,544	31.2	7,943	74.8
13 Cater	Storage		Closed	-
14 Brada	3,212	16.4	16,426	74.5
15 Lilac	5,575	27.4	19,528	78.6
16 Iffley	4,320	36.2	12,995	86.1
17 Ranger	Closed	-	-	
Hamlets				
18 Hatherleigh	Storage	only	Closed	-
19 Redfield	4,595	36.2	7,815	83.8
20 Hamlin	8,756	23.8	33,693	70.5
21 Crutwell	Storage	only	Closed	-
22 Cavalier	8,579	29.1	26,825	79.2
23 Keatley	9,076	34.5	21,770	81.2
24 Bapaume	16,918	45.5	38,478	95.4
25 Robinhood	7,652	39.3	17,628	90.0
26 Fairholme	5,305	37.0	12,289	78.1
27 Sandwith	5,712	37.6	12,694	84.7
28 Mildred	5,579	39.3	13,622	91.4
29 Belbutte	Storage		Closed	02 5
30 Prince	11,839	28.2	39,010	83.5
31 Richard	10,066	26.4	37,066	81.5 75.1
32 Denholm	9,429	22.0	39,861	82.8
33 Ruddell	5,002	27.6	14,811 17,046	94.8
34 Alticane	6,890	45.2	17,040	J+.U

See footnotes at end of table

TABLE 3.10B NUMBER AND PERCENT OF QUOTA ACRES DEVOTED TO CANADIAN WHEAT BOARD GRAINS, 1970-71 AND 1971-72 (continued)

	19	70-71 <sup>a</sup>	1971-72 <sup>b</sup>	
Delivery Point	Seeded Acres	Percent <sup>d</sup>	Assigned Quota Acres <sup>e</sup>	% of Total Quota Acres
35 Glenbush	9,902	44.8	19,877	92.0
36 Fielding	8,565	31.1	24,886	88.1
37 Mont Nebo	5,130	30.4	15,968	79.4
Villages  38 Whitkow  39 Mullingar  40 Holbein  41 Parkside  42 Makwa  43 Livelong  44 Vawn  45 Krydor  46 Medstead  47 Speers  48 Mayfair  49 Maymont  50 Mervin  51 Meota  52 Shell Lake  53 Rabbit Lake  54 Marcelin	9,147 5,666 25,939 13,440 Storage 12,256 11,100 17,629 17,687 11,277 12,241 12,000 16,519 4,265 15,945 20,502 18,248	36.4 41.7 32.9 36.4 only 43.8 28.6 35.2 43.9 26.0 40.8 28.6 43.6 25.0 32.9 37.4 33.3	24,169 12,445 71,635 26,327 Closed 22,748 37,806 48,017 37,921 43,789 25,275 40,120 33,831 16,894 46,189 53,907 51,613	85.1 94.2 74.3 69.0 - 82.8 82.2 91.1 88.4 85.7 87.8 85.2 85.1 81.6 93.1 78.0 89.0
Towns 55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 60 Canwood 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford 65 Leask	25,080	30.0	62,677	79.2
	20,978	40.9	44,509	87.7
	34,717	40.3	81,547	93.6
	23,025	32.7	67,829	87.5
	22,547	36.0	60,430	92.5
	29,774	30.4	83,722	73.1
	24,884	43.7	45,985	79.9
	30,878	35.3	83,852	91.7
	7,635	27.4	21,058	83.4
	25,489	38.9	63,701	85.6
	42,455	36.2	100,421	85.7
Greater Towns 66 Spiritwood 67 Shellbrook 68 Meadow Lake	37,748	43.0	77,773	88.3
	33,341	32.7	94,192	76.0
	76,144	33.6	193,917	68.1

See footnotes at end of table

TABLE 3.10B NUMBER AND PERCENT OF QUOTA ACRES DEVOTED TO CANADIAN WHEAT BOARD GRAINS, 1970-71 AND 1971-72 (concluded)

		1970-71 <sup>a</sup>		1971-72 <sup>b</sup>		
Delivery Point	Seeded Acres	Percent <sup>d</sup>	Assigned Quota Acres <sup>e</sup>	% of Total Quota Acres		
Cities 69 North Battleford	16,125	27.6	54,318	69.6		
Study Area Total	839,563	34.4	2,205,872	81.5		

barley.

 $<sup>^</sup>a_b$ Calculated from Table 2.7. Calculated from Table 3.9. CAcres seeded to CWB grains of wheat, durum, oats and barley. CWB grains acreage as a percent of total acres devoted to CWB grains plus rye, summer fallow and forage crops (i.e., same composition as "specified acres" in previous years). eQuota acres assigned to CWB grains of wheat, durum, oats and

# Quotas Required to Fill Elevator Storage Capacity

Table 3.11 shows the relationship between elevator storage capacity and quota acres for the 1969-70 and 1971-72 crop years. For 1969-70, the quota acreage is simply the specified acreage; for 1971-72 the quota acreage is the assigned acreage as explained in the commentary for Table 3.8. The ratio of bushel capacity to quota acres represents the number of quotas in bushels per acre that are required to fill an empty delivery point. As quota acres increase relative to storage capacity, the number of quotas needed to fill the storage decreases and vice versa. The lower the ratio, the greater is the demand for space at a delivery point.

There does not appear to be any correlation between size of community and ratio nor any significant change in ratios between the two years. In 1969-70, the ratio varied from a low of 1.2 at Big River to a high of 7.8 at Mont Nebo. In 1971-72, the range was from 1.3 at Big River to 8.8 at Tallman. The average number of general quotas required to fill elevator capacity in the study area was 4.1 in 1969-70. The median number was 4.0 in 1969-70 and 3.8 in 1971-72. Thus, assuming zero inventory and no outward shipments, about half of the delivery points could accommodate a 4.0 bushel general quota in 1969-70 and about half could not. For example, Bapaume would be able to hold only half of a 4.0 bushel quota. To the extent that the Canadian Wheat Board seeks to equalize quota levels among producers, delivery points with a low capacity-to-quota acres ratio will, correspondingly, maintain a higher throughput ratio than those points with a high capacity-to-quota acres ratio.

Table 3.11 also gives the approximate number of railway boxcars required at each delivery point to transport a one-bushel quota. Since the number of boxcars needed to move a one-bushel quota depends directly on the number of quota acres, which are usually proportionate to the size of a community, it generally follows that the required number of boxcars increases with the size of the delivery point.

In 1969-70, the number of boxcars required for a one-bushel quota ranged from 4 at Bournemouth to 117 at Meadow Lake. Altogether it took 1,322 boxcars to move a general one-bushel quota from the study area.

Assuming that the supply of boxcars at any point in time is limited, it may be said that a point like Denholm is disadvantaged relative to a point like Mont Nebo. Denholm requires 25 boxcars to move a one-bushel quota and can store 3.5 bushel quotas while Mont Nebo requires 10 boxcars to move a one-bushel quota and can store 7.8 bushel quotas.

<sup>&</sup>lt;sup>1</sup>The throughput ratio of a delivery point is the number of bushels it receives annually divided by its storage capacity in bushels. See Table 3.7.

TABLE 3.11 ELEVATOR CAPACITY VERSUS QUOTA ACRES AND NUMBER OF BOXCARS REQUIRED TO MOVE ONE BUSHEL PER QUOTA ACRE BY DELIVERY POINT

Delivery Point	Elevator Bushel Capacity Aug. 1/69	Quota Acres 1969-70 <sup>a</sup>	Ratio of Bushel Capacity to Quota Acres 1969-70	No. of Boxcars to Move One Bushel Per Quota Acre, 1969-70 <i>b</i>	Ratio of Bushel Capacity to Quota Acres, 1971-72
Too Small to Classi	fy				
l Hartwell	Closed				
2 Cameo	Closed				
3 Bournemouth	23,000	7,528	3.1	4	Closed
4 Dulwich	Closed				
5 Cleeves	Closed Closed				
6 Ormeaux 7 Ordale	56,000	9,965	F 6	_	07
8 Tallman	149,000	19,643	5.6	5	Closed
9 Kilwinning	Closed	19,043	7.6	10	8.8
10 Redberry	40,000	Storage (	ากไห		Closed
11 Scentgrass	61,000	18,570	3.3	10	3.5
12 Polwarth	50,000	9,400	5.3	5	4.7
13 Cater	30,000	Storage (			Closed
14 Brada	97,000	22,680	4.3	12	4.4
15 Lilac	79,000	24,456	3.2	13	3.2
16 Iffley	66,000	10,067	6.6	6	4.4
17 Ranger	28,000	10,474	2.7	6	Closed
Hamlets 18 Hatherleigh	31,000	9,333	3.3	5	Closed
19 Redfield	37,000	16,800	2.2	9	4.0
20 Hamlin	132,000	43,517	3.0	22	2.8
21 Crutwell	73,000	Storage (			Closed
22 Cavalier	157,000	34,176	4.6	18	4.6
23 Keatley	171,000	28,434	6.0	15	6.4
24 Bapaume	70,700	33,517	2.1	17	1.8
25 Robinhood	88,000	20,890	4.2	11	4.5
26 Fairholme	57,000	19,005	3.0	10	3.6
27 Sandwith	56,000	14,156	4.0	8	3.7
28 Mildred	61,000	13,946	4.4	7	4.1
29 Belbutte	41,000	Storage of			Closed
30 Prince	152,000	46,348	3.3	24	3.3
31 Richard	209,000	45,850	4.6	23	4.6
32 Denholm	173,000	49,291	3.5	25	3.4 4.3
33 Ruddell	76,700	18,906	4.1	10 8	5.4
34 Alticane	97,100	15,245	6.4	12	5.6
35 Glenbush	122,000	23,119	5.3 3.3	15	3.3
36 Fielding 37 Mont Nebo	93,000 143,000	28,412 18,219	7.8	10	7.1
37 HOITE NEDO	145,000	10,213	,.0		
Villages		7.0.00=	2.0	10	2.2
38 Whitkow	64,600	19,935	3.2	10	2.3 6.5
39 Mullingar	86,000	15,470	5.6	8	3.9
40 Holbein	378,000	85,941	4.4 4.5	43 21	4.8
41 Parkside	182,000	40,115	4.5 1.6	19	Closed
42 Makwa	57,500	36,299	2.9	14	2.9
43 Livelong	80,000	27,795 43,961	4.5	22	4.3
44 Vawn	197,000	52,392	3.6	27	3.6
45 Krydor 46 Medstead	189,000 69,000	42,514	1.6	22	1.6
47 Speers	256,000	46,368	5.5	24	5.0
48 Mayfair	132,000	28,586	4.6	15	4.6
49 Maymont	147,000	44,028	. 3.3	22	3.1
50 Mervin	104,000	39,978	2.6	20	2.6
51 Meota	136,000	18,074	7.5	10	6.6

TABLE 3.11 ELEVATOR CAPACITY VERSUS QUOTA ACRES AND NUMBER OF BOXCARS REQUIRED TO MOVE ONE BUSHEL PER QUOTA ACRE BY DELIVERY POINT (concluded)

Delivery Point	Elevator Bushel Capacity Aug. 1/69	Quota Acres 1969-70 <sup>a</sup>	Ratio of Bushel Capacity to Quota Acres 1969-70	No. of Boxcars to Move One Bushel Per Quota Acre, 1969-70b	Ratio of Bushel Capacity to Quota Acres, 1971-72
52 Shell Lake 53 Rabbit Lake 54 Marcelin	121,000 238,000 413,600	50,164 51,150 58,190	2.4 4.7 7.1	26 26 30	2.4 3.4 7.1
Towns 55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 60 Canwood 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford 65 Leask	255,500 120,100 370,000 172,000 236,000 438,000 169,000 231,000 32,000 256,000 519,500	86,660 47,389 87,139 74,518 65,873 104,460 54,963 93,525 27,383 68,621 117,744	2.9 2.5 4.2 2.3 3.6 4.2 3.1 2.5 1.2 3.7 4.4	44 24 44 38 33 53 28 47 14 35	3.2 2.4 4.2 2.2 3.6 3.8 2.9 2.5 1.3 3.4
Greater Towns 66 Spiritwood 67 Shellbrook 68 Meadow Lake Cities 69 North Battlefo	373,300 675,000 1,083,400	91,955 105,634 232,166	4.1 6.4 4.7	46 53 117	4.2 5.4 3.8
Study Area Total	,	2,642,521	4.1	1,322	4.0

 $<sup>^</sup>a_b {\rm Same}$  as specified acres, Table 2.6. Assume 2,000 bushels per boxcar.

## Number of Boxcars Per Shunt That Can Be Loaded

The number of boxcars that an elevator operator can load in one group is limited by the length of the rail siding and by the location of his elevator on the siding. Although a siding may accommodate as many as twenty boxcars, perhaps only five or six cars can be loaded for collection by a freight train at one call. How many boxcars can be loaded per shunt is determined both by the number of car lengths to the ends of the siding and by the number of car lengths from the spout of an elevator belonging to one company to the spout of a neighboring elevator belonging to another company.

Data for each delivery point and for each elevator company is shown in Table 3.12. The number of boxcars that a delivery point can handle is usually proportionate to the size of the community, but considerable variation exists. The range in the number of boxcars is from 3 at Big River to 28 at both Borden and Meadow Lake. A total of 656 boxcars can be handled in the study area.

In a comparison of elevator capabilities at Prince and Whitkow (Tables 3.11 and 3.12), Prince requires 24 cars to move a one-bushel quota and 8 boxcars can be loaded per shunt, while Whitkow requires 10 boxcars to move a one-bushel quota and 19 boxcars can be loaded per shunt. Whitkow has a definite advantage over Prince.

TABLE 3.12 MAXIMUM NUMBER OF BOXCARS PER SHUNT THAT CAN BE LOADED BY DELIVERY POINT AND ELEVATOR COMPANY, 1972-73

Delivery Point	Number Boxcars Point		Numbe Boxcar Elevator Companies Elevat	s per
Too Small to Classi 8 Tallman	fy 9	C.N.	Saskatchewan Wheat Pool A & B	9
11 Scentgrass	8	C.N.	Saskatchewan Wheat Pool A & B	8
12 Polwarth	5	C.N.	National Grain	5
14 Brada	8	C.N.	Saskatchewan Wheat Pool A & B	8
15 Lilac	5	C.N.	Saskatchewan Wheat Pool	5
16 Iffley	8	C.N.	Saskatchewan Wheat Pool A & B	8
Hamlets 19 Redfield	8	C.P.	Saskatchewan Wheat Pool	8
20 Hamlin	8	C.N.	National Grain Saskatchewan Wheat Pool	4 4
22 Cavalier	10	C.N.	Saskatchewan Wheat Pool A & B	10
23 Keatley	21	C.N.	Saskatchewan Wheat Pool A, B & C	21
24 Bapaume	8	C.N.	Saskatchewan Wheat Pool A & B	8
25 Robinhood	8	C.N.	Saskatchewan Wheat Pool	8
26 Fairholme	10	C.N.	Saskatchewan Wheat Pool A & B	10
27 Sandwith	10	C.N.	Pioneer Grain	10
28 Mildred	10	C.N.	Saskatchewan Wheat Pool	10
30 Prince	8	C.N.	National Grain Saskatchewan Wheat Pool	4
31 Richard	19	C.N.	Saskatchewan Wheat Pool A, B, C & D	19
32 Denholm	9	C.N.	National Grain Saskatchewan Wheat Pool	4 5

TABLE 3.12 MAXIMUM NUMBER OF BOXCARS PER SHUNT THAT CAN BE LOADED BY DELIVERY POINT AND ELEVATOR COMPANY, 1972-73 (continued)

Delivery Point	Number Boxcars Point		Number of Boxcars per Elevator Companies Elevator Co
33 Ruddell	10	C.N.	Saskatchewan Wheat Pool 10
34 Alticane	12	C.N.	Saskatchewan Wheat Pool 12
35 Glenbush	8	C.N.	Pioneer Grain 4 Saskatchewan Wheat Pool 4
36 Fielding	12	C.N.	National Grain 5 Saskatchewan Wheat Pool 7
37 Mont Nebo	7	C.N.	Saskatchewan Wheat Pool A & B 7
<i>Villages</i> 38 Whitkow	19	C.P.	Saskatchewan Wheat Pool 19
39 Mullingar	7	C.N.	Saskatchewan Wheat Pool A & B 7
40 Holbein	16	C.N.	National Grain 4 Saskatchewan Wheat Pool A & B 12
41 Parkside	12	C.N.	National Grain 4 Saskatchewan Wheat Pool 8
43 Livelong	5	C.N.	Saskatchewan Wheat Pool A & B 5
44 Vawn	5	C.N.	Pioneer Grain 2 Saskatchewan Wheat Pool 3
45 Krydor	19	C.N.	Saskatchewan Wheat Pool A, B, C & D 19
46 Medstead	5	C.N.	Saskatchewan Wheat Pool 5
47 Speers	19	C.N.	National Grain A & B 10 Saskatchewan Wheat Pool 9
48 Mayfair	9	C.N.	Saskatchewan Wheat Pool 9
49 Maymont	13	C.N.	Saskatchewan Wheat Pool A & B 13
50 Mervin	8	C.N.	Saskatchewan Wheat Pool A & B 8

TABLE 3.12 MAXIMUM NUMBER OF BOXCARS PER SHUNT THAT CAN BE LOADED BY DELIVERY POINT AND ELEVATOR COMPANY, 1972-73 (continued)

Delivery Point	Number Boxcars Point		Numbe Boxcar Elevator Companies Elevat	s per
51 Meota	13	C.N.	Saskatchewan Wheat Pool A, B & C	13
52 Shell Lake	8	C.N.	National Grain Saskatchewan Wheat Pool	4
53 Rabbit Lake	18	C.N.	Pioneer Grain 1 & 2 Saskatchewan Wheat Pool	7 11
54 Marcelin	15	C.N.	National Grain Saskatchewan Wheat Pool A, B & C	6 9
<i>Towns</i> 55 Debden	21	C.N.	Saskatchewan Wheat Pool A & B	21
56 Leoville	8	C.P.	Saskatchewan Wheat Pool A & B	8
57 Borden	28	C.N.	National Grain Saskatchewan Wheat Pool A & B United Grain Growers 1 & 2	5 13 10
58 Edam	14	C.N.	National Grain Saskatchewan Wheat Pool	3 11
59 Radisson	10	C.N.	Parrish & Heimbecker Saskatchewan Wheat Pool	6 4
60 Canwood	12	C.N.	National Grain Saskatchewan Wheat Pool A, B & C	3 9
61 Glaslyn	12	C.N.	Pioneer Grain 1 & 2 Saskatchewan Wheat Pool	8 4
62 Hafford	17	C.N.	National Grain Pioneer Grain Saskatchewan Wheat Pool	5 7 5
63 Big River	3	C.N.	Saskatchewan Wheat Pool	3
64 Turtleford	8	C.N.	Pioneer Grain Saskatchewan Wheat Pool	4

TABLE 3.12 MAXIMUM NUMBER OF BOXCARS PER SHUNT THAT CAN BE LOADED BY DELIVERY POINT AND ELEVATOR COMPANY, 1972-73 (concluded)

Delivery Point	Number Boxcars Point		Numbe Boxcar Elevator Companies Elevat	
65 Leask	20	C.N.	National Grain Pioneer Grain Saskatchewan Wheat Pool A, B & C	4 4 12
Greater Towns 66 Spiritwood	16	C.N.	National Grain Pioneer Grain Saskatchewan Wheat Pool A & B	4 4 8
67 Shellbrook	21	C.N.	Pioneer Grain Saskatchewan Wheat Pool A, B, C & D	7 14
68 Meadow Lake	28	C.P.	Pioneer Grain Saskatchewan Wheat Pool, A, B, C, D, E, F & G	4 24
Cities 69 North Battleford	26	C.N.	National Grain Parrish & Heimbecker Saskatchewan Wheat Pool A & B	10 6 10
Study Area Total	656			

Source: Canadian Wheat Board, Winnipeg.

# Block Loading System for Grain

A new system of issuing orders and allocating boxcars called the Canadian Wheat Board Block Loading System came into effect at the beginning of the 1969-70 crop year. The blocks consist of delivery points for grain that are situated in specified groups of contiguous railway subdivisions, the points of one railway company usually being kept separate from those of the other railway company. The original block configuration was revised prior to the 1971-72 crop year.

Communication between the Board and the elevator operators has improved, so the Board now knows the kinds, grades and quantities of grain at every delivery point in each block and, accordingly, issues shipping orders to the appropriate elevator companies. These firms then allocate boxcars to elevators in the block for loading the particular grains that the Board wants in forward positions.

Table 3.13 groups the delivery points of the study area within their respective loading blocks. The names of the railway subdivisions and the number of cars that can be loaded at one time at each point are also given.

TABLE 3.13 BLOCK LOADING SYSTEM FOR GRAIN IN THE STUDY AREA, 1971-72

Shipping Block & Delivery Points	Railway Subdivision	Number of Boxcars Per Point
Prince Albert East Block No. 14 Brada 32 Denholm 33 Ruddell 36 Fielding 49 Maymont 57 Borden 59 Radisson 69 North Battleford	Langham Langham Langham Langham Langham Langham Langham Langham Langham Battleford	8 9 10 12 13 28 10 26
Prince Albert West Block No. 8 Tallman 12 Polwarth 15 Lilac 22 Cavalier 23 Keatley 24 Bapaume 25 Robinhood 26 Fairholme 28 Mildred 30 Prince 31 Richard 34 Alticane 37 Mont Nebo 39 Mullingar 40 Holbein 41 Parkside 43 Livelong 44 Vawn 45 Krydor 47 Speers 48 Mayfair 50 Mervin 51 Meota 52 Shell Lake 53 Rabbit Lake 54 Marcelin 55 Debden 58 Edam 60 Canwood 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford 65 Leask	Blaine Lake Big River Blaine Lake Turtleford Robinhood Amiens Robinhood Amiens Turtleford Blaine Lake Robinhood Amiens Robinhood Amiens Robinhood Amiens Robinhood Turtleford Blaine Lake Blaine Lake Robinhood Turtleford Blaine Lake Blaine Lake Blaine Lake Robinhood Turtleford Blaine Lake Robinhood Turtleford Turtleford Amiens Robinhood Blaine Lake Big River Turtleford Big River Turtleford Blaine Lake Big River Turtleford Blaine Lake	9 5 5 10 21 8 8 10 10 10 8 19 12 7 7 7 16 12 5 5 19 19 9 8 13 8 18 15 21 14 12 12 17 3 8 20

TABLE 3.13 BLOCK LOADING SYSTEM FOR GRAIN IN THE STUDY AREA, 1971-72 (concluded)

Shipping Block &	Railway	Number of Boxcars
Delivery Points	Subdivision	Per Point
66 Spiritwood	Amiens	16
67 Shellbrook	Blaine Lake	21
Saskatoon Block No. 75 (C.P.) 56 Leoville 68 Meadow Lake	Meadow Lake Meadow Lake	8 28
Wilkie Block No. 76 (C.P.) 11 Scentgrass 16 Iffley 19 Redfield 20 Hamlin 27 Sandwith 35 Glenbush 38 Whitkow 46 Medstead	Hatherleigh (C.N.) Hatherleigh (C.N.) Whitkow Turtleford (C.N.) Hatherleigh (C.N.) Robinhood (C.N.) Whitkow Robinhood (C.N.)	8 8 8 .0 8 19 5

Source: Canadian Wheat Board, Winnipeg.

### Farm Trucks

Table 3.14 presents information on the number, size and age of farm trucks registered in the Shellbrook-Turtleford study area. Although it is difficult to translate gross vehicle weights into ton capacities, trucks in the 0-6,000 pound group represent 1/2-ton trucks and trucks at the upper end of the scale, about 21,000 pounds and over, represent 3-ton and 4-ton trucks.

A total of 7,288 farm trucks were matched with 4,805 farm operators in the study area. Almost two thirds, 66.2 percent, were in the three smallest size groups. The average size group was 9,000 - 11,000 pounds. About 49 percent of the trucks were made prior to 1960-61 so they were over ten years old. The Canadian Transport Commission estimated the ownership of trucks to be as follows:

No. of Farm Operators	No. of Trucks Owned
2,893	1
1,554	2
291	3
52	4
15	5 or more

 $<sup>^{1}</sup>$ This accounted for 75.8 percent of the 6,339 permits issued in 1970-71, Table 3.2.

ESTIMATED NUMBER OF FARM TRUCKS BY SIZE AND MODEL YEAR IN THE STUDY AREA, 1970ª TABLE 3.14

	dn	1946	1948	1950	1952	1954	1956	1958	1959	Model Year 9 1960 1	r 1961	1962	1963	1964	1965	1966	1967	1968	1969		
Size of Truck (Gross Vehicle Weight)	to 1945	to 1947	to 1949	to 1951	to 1953	to 1955	to 1957	to 1959	to 1960	to 1961	to 1962	to 1963	to 1964	to 1965		to 1967	to 1968	to 1969		Total F	Percent
- 1bs								1	number	of trucks	cks -									i	
000,9 - 0	14	12	46	122	145	64	16	45	82	84	64	78	124	145	147	170	232	225	289	2,179	29.9
6,001 - 9,000	4	10	22	121	153	43	72	44	43	55	51	09	. 22	=======================================	128	152	174	124	152	1,609	22.1
9,001 - 11,000	14	15	153	263	248	99	36	15	33	25	20	18	18	56	17	25	19	19	15	1,035	14.2
11,001 - 13,000	15	12	22	129	176	30	31	14	15	21	12	12	19	24	25	19	18	9	9	641	80.00
13,001 - 15,000	2	co	Ξ	34	30	10	7	4	m	œ	_	m	6	7	7	9	12	2	6	171	2.3
15,001 - 17,000	22	14	13	20	32	7	7	9	2	9	_	2	10	10	7	7	7	9	3	168	2.3
17,001 - 19,000	17	14	21	35	41	91	œ	4	7	6	e	က	22	7	4	14	œ	m	4	223	3.1
19,001 - 21,000	17	34	54	43	9/	20	23	4	13	15	က	1	13	19	13	18	19	œ		404	5.5
21,001 - 23,000	2	13	12	10	14	_	∞		2	က		2	m	2	2	4	4	_	-	87	1.2
23,001 - 25,000	œ	17	25	19	41	Ξ	22	4	-	2	œ	2	10	13	=	7	15	œ	2	232	3.2
25,001 - 27,000	2	-	7	10	20	œ	10	m	2	Ξ	4	9	4	15	က	2	Ξ	2	9	133	1.8
27,001 - 29,000	-	0	21	15	35	16	44	Ε	7	18	24	17	25	28	19	31	39	24	19	403	5.5
Over 29,000	<b>-</b>									_									-	က	0.1
Total	105	154	477	821 1	1,011	282	359	154	210	258	191	220	295	407	383	458	558	434	511	7,288	100.0
Percent	1.4	2.1	6.5 11.3		13.9	3.9	4.9	2.1	2.9	3.5	2.6	3.0	4.0	5.6	5.3	6.3	7.7	0.9	7.0	100.0	

<sup>a</sup>This matrix is a result of a clerical match between the 1970 Saskatchewan motor vehicle registrations and farm operators in the 1970-71 crop number of farm operators at a given delivery point may not equal total farm operators, but approximately 76 percent of all possible matches were completed with an estimated error of 10 percent. Two other points may also account for the difference: (1) it is a recognizable fact that some farmers arrange to have their grain hauled by a neighbor; (2) some farm trucks are for non-farm use only and as such are not year. Names and addresses were matched to identify which trucks were owned by each operator. As there were difficulties in matching, the registered.

Source: Canadian Transport Commission, Ottawa.

# Farm to Elevator Hauling Distances

Tributary areas that supplied grain to delivery points for the 1969-70 crop year are shown in Figure 4.1. As recorded in individual Canadian Wheat Board permit books, each quarter section was plotted to produce a graphic portrayal of the relative sizes and shapes of hinterlands. Unimproved farmland is, of course, included by this method of presentation. Crown land, wasteland, bodies of water and farmland that is tributary to delivery points outside the study area are excluded.

Table 3.15 shows the distances that grain was hauled from farms to elevators in 1969-70. In a sense, the average hauling distance also measures the geographic size of a hinterland as additional acres generally increase the hauling distance. The data was derived from the hinterland map for 1969-70, Figure 4.1, by manually measuring the grid distance between the delivery point and the midpoint of each section block. The delivery point was always taken to be located at one corner of a section, resulting in the minimum distance being 1.0 mile and all other distances being 1.0 plus 1.0, 2.0 or 3.0 miles, etc., to the furthest boundary of the hinterland. Where a natural barrier such as a river bisects the study area, an allowance is made for the extra distance producers must haul via available roads.

The average distance of each quarter section from its delivery point was calculated as follows: the distance of each section, as derived above, was weighted or multiplied by the relevant number of quarter sections within that section, the products of these calculations being accumulated and their sum divided by the total number of quarter sections in the hinterland. One might say that the result is the average distance each section is from the delivery point weighted by the number of relevant quarter sections.

As an estimate of farm to elevator hauling distances, this method may be faulted for not taking into account either the actual locations of on-farm facilities for grain storage or the existing network of roads. Such criticism may not be too serious, however, since grain is usually hauled from the field to the farm storage, and taken from there to the country elevator at a later date; therefore, the hauling actually originates from each quarter section. It is difficult to estimate the magnitude of the error introduced by ignoring roads, but the error will be greater for a hinterland with a few roads than for a hinterland with adequate roads. To the extent that error is introduced by ignoring roads, the method used underestimates hauling distances.

 $<sup>^{</sup>I}\mathrm{A}$  "relevant" quarter section was both recorded in some farmer's delivery permit book and contained in the hinterland of the delivery point in question.

The average hauling distance in the study area in 1969-70 was 9.32 miles. The largest maximum distance was 57 miles at Meadow Lake and the smallest maximum distance was 6 miles at Ordale.

Meadow Lake had the longest average hauling distance, 20.63 miles; while Ordale had the shortest average hauling distance, 3.03 miles.

TABLE 3.15 FARM TO ELEVATOR HAULING DISTANCES BY DELIVERY POINT, 1969-70

		()a
Maximum		Average
	- miles	_
	Closed	
. 11		4.34
	Closed	
	Closed	
	Closed	
6		3.03
15		5.75
	Storage	
		7.05
38		4.75
	Storage	
		5.77
		5.32
		5.50
13		5.63
		4.18
		4.83
50		7.87
1.7	Storage	
		6.73
		5.78
		8.13 5.46
		5.88
		4.57
		6.03
10	Storage	
25	Storage	8.32
		8.23
26		6.70
		3.63
		5.88
		4.51
		4.51
18		4.59
12		5.41
20		6.67
38		14.41
	11 6 15 24 38 32 18 26 13 15 18 50 17 30 21 18 20 11 18 20 11 18 21 18 20 11 18 21 18 21 18 21 18 21 21 21 21 21 21 21 21 21 21	- miles  Closed Closed Closed Closed Closed Storage  24  38  Storage  32  18  26  13  Storage  17  30  21  18  20  11  18  Storage  25  35  26  10  18  17  12  18  12  20

TABLE 3.15 FARM TO ELEVATOR HAULING DISTANCES BY DELIVERY POINT, 1969-70 (concluded)

		69 <b>-</b> 70a
Delivery Point	Maximum	Average
	- m	iles -
41 Parkside 42 Makwa 43 Livelong 44 Vawn 45 Krydor 46 Medstead 47 Speers 48 Mayfair 49 Maymont 50 Mervin 51 Meota 52 Shell Lake 53 Rabbit Lake 54 Marcelin	24 25 20 20 19 17 24 16 39 18 21 18 31	5.58 7.09 8.53 6.56 7.35 7.11 5.90 6.46 5.94 9.32 8.17 6.91 7.11 7.56
Towns 55 Debden 56 Leoville 57 Borden 58 Edam 59 Radisson 60 Canwood 61 Glaslyn 62 Hafford 63 Big River 64 Turtleford 65 Leask	24 30 25 23 17 33 18 30 23 30 29	8.71 7.96 10.45 8.27 6.68 10.28 7.71 10.53 9.07 7.98 10.14
Greater Towns 66 Spiritwood 67 Shellbrook 68 Meadow Lake	23 37 57	9.05 11.78 20.63
Cities 69 North Battleford	40	14.32
Total Study Area	57	9,47

<sup>&</sup>lt;sup>a</sup>As the minimum distance in all cases was assumed to be 1.0 mile, the range in distances for each hinterland is the maximum minus 1.0 mile.

#### PART IV

# A SUGGESTED ALTERNATIVE GRAIN COLLECTION SYSTEM

Community characteristics, grain production characteristics, and grain marketing and handling characteristics of the study area have been covered in the first three parts of this report. Part IV endeavors to show what changes may take place if some delivery points are closed. The proposed alternative system has no official status. It is neither a set of recommendations nor a set of final adjustments that will in fact occur. The authors have scanned the delivery points and selected for closure the ones that seem least likely to survive when judged by the traffic density of the rail lines serving them, by the number of delivery permits issued for them, and by the distance from them to other points that will probably remain open. Some consideration has been given to the wishes of the railway and elevator companies. Applications that have been filed with the Canadian Transport Commission for permission to abandon lines were used to gauge what the railway companies wanted. Records of the volume of grain receipts put through delivery points each year were considered to be evidence of what the elevator companies wanted. Figure 4.2 shows the hinterlands of delivery points for grain that are assumed to stay open. This map is only intended to be an approximation of what the future may hold in store for farmers in the Shellbrook-Turtleford region.

For purposes of this study, 26 delivery points are assumed closed: il on the Robinhood railway subdivision, 2 on the Hatherleigh subdivision, 2 on the Whitkow subdivision and ll scattered throughout the study region. Of the 37 points remaining open, 13 would not be affected by additional grain receipts upon rationalization (Table 4.1). One delivery point, Blaine Lake, which is located in another region<sup>1</sup>, was affected by additional grain receipts. Data for Blaine Lake appears only in Part IV and in Figures 4.1 and 4.2.

Figure 4.2 was derived from 1969-70 hinterlands by diverting each quarter section from those points assumed to be closed to alternate points assumed to be open. Although an element of subjective judgment was involved, the following criteria served as guides in the selection of alternate delivery points: (1) shortest hauling distance; (2) road conditions; and (3) size of community and number of services at alternate points. These criteria are listed in order of importance, but in some instances the second criterion took precedence over the first one. Only minor importance was given to the third criterion.

<sup>&</sup>lt;sup>1</sup>For a more detailed examination of Blaine Lake, see <u>The Rosthern</u> Region of Saskatchewan by J.W. Channon, H.R. Fast and D.A. Neil, Economics Branch, Agriculture Canada. Pub. No. 72/6, October, 1972.

TABLE 4.1 STATUS OF DELIVERY POINTS AFTER DIVERSION, 1969-70<sup>a</sup>

	Points Remain	ning Open
Points Assumed	Affected	Unaffected
Closed	by Diversion	by Diversion
3 Bournemouth 7 Ordale 8 Tallman 10 Redberry 11 Scentgrass 12 Polwarth 13 Cater 14 Brada 15 Lilac 17 Ranger 18 Hatherleigh 19 Redfield 21 Crutwell 23 Keatley 25 Robinhood 26 Fairholme 29 Belbutte 34 Alticane 35 Glenbush 38 Whitkow 39 Mullingar 42 Makwa 43 Livelong 48 Mayfair 53 Rabbit Lake 61 Glaslyn	16 Iffley 20 Hamlin 22 Cavalier 27 Sandwith 30 Prince 31 Richard 32 Denholm 33 Ruddell 37 Mont Nebo 41 Parkside 45 Krydor 46 Medstead 47 Speers 49 Maymont 50 Mervin 55 Debden 56 Leoville 58 Edam 60 Canwood 62 Hafford 4 Turtleford 4 Blaine Lake 66 Spiritwood 68 Meadow Lake 69 North Battleford	24 Bapaume 28 Mildred 36 Fielding 40 Holbein 44 Vawn 51 Meota 52 Shell Lake 54 Marcelin 57 Borden 59 Radisson 63 Big River 65 Leask 67 Shellbrook

<sup>\*</sup>Blaine Lake, a greater town in the Rosthern Study Region, appears in Part IV of this study only to the extent that it is affected by diversion in the Shellbrook-Turtleford region.

 $<sup>^{</sup>a}$ Hartwell, Cameo, Dulwich, Cleeves, Ormeaux and Kilwinning were closed prior to 1969-70. Closed for storage in 1969-70.

# Probable Diversion of Acreages and Bushels Conditional on Closing Certain Delivery Points

Table 4.2, the "loss" aspect of diversion, and Table 4.3, the "gain" aspect of diversion, show the probable changes in acreages and bushels that may occur should the specified points be closed. In Table 4.2, the percentage distribution figures were determined on the basis of the number of quarter sections diverted to each alternate delivery point. For example, 64.6 percent of all the quarter sections in the hinterland of Ordale were diverted to Mont Nebo, 20.2 percent went to Canwood, and 15.2 percent to Parkside. Of the 16,008 acres of farmland at Ordale in 1969-70, 10,341 acres were transferred to Mont Nebo with 3,234 acres being given to Canwood and 2,433 acres to Parkside. Altogether, 825,854 acres, 20.4 percent of slightly over 4,000,000 acres in the study area, were transferred from points assumed to be closed to points assumed to remain open.

Estimates of bushel diversion were also made on the basis of the percentage distribution of quarter sections. Of the 53,033 bushels of grain received at Ordale in 1969-70, it was assumed that 34,259 bushels, 64.6 percent, would be delivered to Mont Nebo with 10,713 bushels, 20.2 percent, going to Canwood and 8,061 bushels, 15.2 percent, going to Parkside. Because annual receipts fluctuate considerably, bushel diversions on the basis of the ten-year average of the crop years from 1960-61 to 1969-70 have been calculated in the same manner. If the specified delivery points in Table 4.2 had been closed in 1969-70, there would have been an estimated diversion of 3,335,381 bushels on the one-year basis compared with an estimated diversion of 3,547,417 bushels on the ten-year average basis. In this table, the specified delivery points are listed in an ascending order according to the average annual bushels assumed to be diverted from 1960-61 to 1969-70.

In Table 4.3, the acreage and bushel amounts transferred to each diversion point were taken from Table 4.2. The percent diverted data was derived from the figures on the same page for acres diverted 1969-70. As in the previous table, listed delivery points are arranged in an ascending order on the basis of the ten-year average receipts from 1960-61 to 1969-70. Maymont gained the least number of bushels, 4,224, while Medstead gained the most bushels, 521,253.

TABLE 4.2 DIVERSIONS (FROM-TO) OF ACREAGES AND BUSHELS CONDITIONAL ON THE CLOSING OF SPECIFIED DELIVERY POINTS, BASIS 1969-70

		Percent of	Acres	Busi	hels Diverted
	losed Point ersion Point	Quarter Sections Diverted	Diverted 1969-70	1969-70	Ten-Year Average 1960-61 to 1969-70
From: To:	18 Hatherleigh 27 Sandwith 16 Iffley	2.5 97.5	496 19,351	1,089 42,470	1,221 47,602
	Tota1	100.0	19,847	43,559	48,823
From: To:	3 Bournemouth 46 Medstead 27 Sandwith	2.5 97.5	327 12,767	1,567 61,125	1,284 50,080
	Total	100.0	13,094	62,692	51,364
From: To:	7 Ordale 41 Parkside 60 Canwood 37 Mont Nebo	15.2 20.2 64.6	2,433 3,234 10,341	8,061 10,713 34,259	10,446 13,883 44,397
	Total	100.0	16,008	53,033	68,726
From: To:	17 Ranger 56 Leoville	100.0	18,208	14,108	75,589
	Total	100.0	18,208	14,108	75,589
From: To:	12 Polwarth 55 Debden 60 Canwood	44.6 55.4	5,959 7,402	41,388 51,411	37,587 46,688
	<u>Total</u>	100.0	13,361	92,799	84,275
From: To:	42 Makwa 68 Meadow Lake	100.0	58,405	7,790	100,617
	Total	100.0	58,405	7,790	100,617
From: To:	26 Fairholme 50 Mervin 46 Medstead 64 Turtleford	10.3 16.1 73.6	3,519 5,501 25,147	11,292 17,650 80,686	10,376 16,218 74,139
	<u>Total</u>	100.0	34,167	109,628	100,733
From: To:	19 Redfield 27 Sandwith 47 Speers 16 Iffley 31 Richard	1.2 2.9 43.0 52.9	344 832 12,331 15,171	1,247 3,013 44,678 54,964	1,215 2,937 43,551 53,577
	Total	100.0	28,678	103,902	101,280
From: To:	34 Alticane 45 Krydor 31 Richard 47 Speers 62 Hafford	3.5 6.4 39.8 50.3	1,007 1,841 11,448 14,468	3,726 6,813 42,370 53,548	4,628 8,462 52,623 66,507
	Total	100.0	28,764	106,457	132,220

TABLE 4.2 DIVERSIONS (FROM-TO) OF ACREAGES AND BUSHELS CONDITIONAL ON THE CLOSING OF SPECIFIED DELIVERY POINTS, BASIS 1969-70 (continued)

Evom C	losed Point	Percent of	Acres	Bus	hels Diverted
	losed Point ersion Point	Quarter Sections Diverted	Diverted 1969-70	1969-70	Ten-Year Average 1960-61 to 1969-70
From: To:	11 Scentgrass 22 Cavalier 20 Hamlin 30 Prince 16 Iffley	7.3 8.9 27.9 55.9	2,085 2,542 7,968 15,966	9,591 11,693 36,657 73,444	9,763 11,903 37,314 74,761
	Total	100.0	28,561	131,385	133,741
From: To:	25 Robinhood 27 Sandwith 46 Medstead	12.5 87.5	5,093 35,655	18,504 129,530	18,232 127,627
	<u>Total</u>	100.0	40,748	148,034	145,859
From: To:	39 Mullingar 62 Hafford 16 Iffley 47 Speers 66 Spiritwood 27 Sandwith	7.7 13.8 15.5 18.2 44.8	2,362 4,233 4,754 5,582 13,742	8,949 16,039 18,015 21,153 52,068	11,290 20,235 22,727 26,686 65,689
	Total	100.0	30,673	116,224	146,627
From: To:	43 Livelong 50 Mervin 64 Turtleford	3.5 96.5	2,237 61,686	5,354 147,616	5,249 144,708
	<u>Total</u>	100.0	63,923	152,970	149,957
From: To:	35 Glenbush 27 Sandwith 46 Medstead	47.5 52.5	15,900 17,574	89,542 98,968	89,124 98,506
	<u>Total</u>	100.0	33,474	188,510	187,630
From: To:	14 Brada 47 Speers 31 Richard 16 Iffley 69 North Battleford 32 Denholm	0.6 1.2 3.0 40.8 54.4	160 319 798 10,859 14,478	987 1,975 4,937 67,140 89,521	1,193 2,387 5,966 81,145 108,193
	<u>Total</u>	100.0	26,614	164,560	198,884
From: To:	15 Lilac 49 Maymont 33 Ruddell 31 Richard 32 Denholm	2.1 26.9 34.2 36.8	674 8,632 10,975 11,809	4,159 53,280 67,738 72,888	4,224 54,105 68,788 74,018
	Total	100.0	32,090	198,065	201,135
From: To:	48 Mayfair 27 Sandwith 62 Hafford 16 Iffley 31 Richard 47 Speers	5.7 17.9 18.4 19.9 38.1	3,086 9,693 9,963 10,776 20,631	13,792 43,312 44,521 48,151 92,188	11,622 36,497 37,516 40,574 77,682
	Total	100.0	54,149	241,964	203,891

TABLE 4.2 DIVERSIONS (FROM-TO) OF ACREAGES AND BUSHELS CONDITIONAL ON THE CLOSING OF SPECIFIED DELIVERY POINTS, BASIS 1969-70 (concluded)

		Percent of	Acres	Bus	hels Diverted
	losed Point ersion Point	Quarter Sections Diverted	Diverted 1969-70	1969-70	Ten-Year Average 1960-61 to 1969-70
From: To:	8 Tallman * Blaine Lake 45 Krydor	46.6 53.4	11,235 12,874	57,874 66,320	100,666 115,356
	<u>Total</u>	100.0	24,109	124,194	216,022
From: To:	38 Whitkow 32 Denholm 27 Sandwith 20 Hamlin 31 Richard 16 Iffley	2.3 2.4 15.5 23.0 56.8	782 816 5,271 7,821 19,316	2,940 3,069 19,819 29,409 72,627	5,427 5,663 36,575 54,272 134,029
	Total	100.0	34,006	127,864	235,966
From: To:	23 Keatley 45 Krydor 27 Sandwith 31 Richard 62 Hafford 47 Speers	0.4 2.5 6.2 32.9 58.0	161 1,004 2,491 13,217 23,301	944 5,899 14,630 136,865 77,636	965 6,029 14,952 139,878 79,344
	Total	100.0	40,174	235,974	241,168
From: To:	53 Rabbit Lake 46 Medstead 47 Speers 16 Iffley 66 Spiritwood 27 Sandwith	0.8 0.8 10.5 12.7 75.2	679 679 8,909 10,776 63,807	4,142 4,142 54,358 65,747 389,307	2,800 2,800 36,752 44,453 263,217
	Total	100.0	84,850	517,696	350,022
From: To:	61 Glaslyn 22 Cavalier 58 Edam 64 Turtleford 50 Mervin 46 Medstead	1.1 4.5 7.0 13.7 73.7	1,121 4,588 7,137 13,967 75,138	4,334 17,729 27,578 53,974 290,358	4,102 16,780 26,102 51,086 274,818
	Total	100.0	101,951	393,973	372,888
Study	Area Total		825,854	3,335,381	3,547,417

<sup>\*</sup>See footnote Table 4.3.

TABLE 4.3 DIVERSIONS (TO-FROM) OF ACREAGES AND BUSHELS CONDITIONAL ON THE CLOSING OF SPECIFIED DELIVERY POINTS, BASIS 1969-70

To Div	ersion Point	Percent	Acres	Bus	hels Diverted
From C	losed Point	Diverted	Diverted 1969-70	1969-70	Ten-Year Average 1960-61 to 1969-70
To: From:	49 Maymont 15 Lilac	100.0	674	4,159	4,224
	<u>Total</u>	100.0	674	4,159	4,224
To:	41 Parkside			.,,,,,	, ,
From:	7 Ordale	100.0	2,433	8,061	10,446
	Total	100.0	2,433	8,061	10,446
To: From:	22 Cavalier 61 Glaslyn 11 Scentgrass	35.0 65.0	1,121 2,085	4,334 9,591	4,102 9,763
	<u>Total</u>	100.0	3,206	13,925	13,865
To: From:	58 Edam 61 Glaslyn	100.0	4,588	17,729	16,780
	Total	100.0	4,588	17,729	16,780
To: From:	30 Prince 11 Scentgrass	100.0	7,968	36,657	37,314
	<u>Total</u>	100.0	7,968	36,657	37,314
To:	55 Debden 12 Polwarth	100.0	5,959	41,388	37,587
	Total	100.0	5,959	41,388	37,587
To:	37 Mont Nebo 7 Ordale	100.0	10,341	34,259	44,397
	<u>Total</u>	100.0	10,341	34,259	44,397
To: rom:	20 Hamlin 11 Scentgrass 38 Whitkow	32.5 67.5	2,542 5,271	11,693 19,819	11,903 36,575
	<u>Total</u>	100.0	7,813	31,512	48,478
To:	33 Ruddell 15 Lilac	100.0	8,632	53,280	54,105
	<u>Total</u>	100.0	8,632	53,280	54,105
To: rom:	60 Canwood 7 Ordale 12 Polwarth	30.4 69.6	3,234 7,402	10,713 51,411	13,883 46,688
	Total	100.0	10,636	62,124	60,571
To: rom:	50 Mervin 43 Livelong 26 Fairholme 61 Glaslyn	11.4 17.8 70.8	2,237 3,519 13,967	5,354 11,292 53,974	5,249 10,376 51,086
	Total	100.0	19,723	70,620	66,711

TABLE 4.3 DIVERSIONS (TO-FROM) OF ACREAGES AND BUSHELS CONDITIONAL ON THE CLOSING OF SPECIFIED DELIVERY POINTS, BASIS 1969-70 (continued)

To Div	ersion Point	Percent	Acres Diverted	Bus	hels Diverted Ten-Year Average
	losed Point	Diverted	1969-70	1969-70	1960-61 to 1969-70
To:	66 Spiritwood				
From:	39 Mullingar	34.1	5,582	21,153	26,686
	53 Rabbit Lake	65.9	10,776	65,747	44,453
	<u>Total</u>	100.0	16,358	86,900	71,139
To:	56 Leoville				
From:	17 Ranger	100.0	18,208	14,108	75,589
	<u>Total</u>	100.0	18,208	14,108	75,589
To:	69 North Battleford				
From:	14 Brada	100.0	10,859	67,140	81,145
	<u>Total</u>	100.0	10,859	67,140	81,145
To:	68 Meadow Lake				
From:	42 Makwa	100.0	58,405	7,790	100,617
	<u>Total</u>	100.0	58,405	7,790	100,617
To:	* Blaine Lake	100.0	11 005	F7 074	100.000
From:	8 Tallman	100.0	11,235	57,874	100,666
	Total	100.0	11,235	57,874	100,666
To:	45 Krydor				
From:	23 Keatley	1.1	161	944	965
	34 Alticane 8 Tallman	7.2 91.7	1,007 12,874	3,726 66,320	4,628 115,356
	Total	100.0	14,042	70,990	120,949
To:	32 Denholm				
From:	38 Whitkow	2.9	782	2,940	5,427
	15 Lilac	43.6	11,809	72,888	74,018
	14 Brada	53.5	14,478	89,521	108,193
	<u>Total</u>	100.0	27,069	165,349	187,638
To:	62 Hafford				
From:	39 Mullingar	5.9	2,362	8,949	11,290
	48 Mayfair 34 Alticane	24.4 36.4	9,693 14,468	43,312 58,548	36,497 66,507
	23 Keatley	33.3	13,217	77,636	79,344
	Total	100.0	39,740	183,445	193,638
To:	31 Richard				
From:	14 Brada	0.7	314	1,975	2,387
	34 Alticane	3.7	1,841	6,813	8,462
	23 Keatley	5.1	2,491	14,630	14,952
	48 Mayfair	21.8	10,776	48,151	40,574
	19 Redfield	30.7	15,171	54,964	53,577
	38 Whitkow 15 Lilac	15.8	7,821	29,409	54 <b>,</b> 272
		22.2	10,975	67,738	68,788
	Total	100.0	49,394	223,680	243,012

See footnotes at end of table

TABLE 4.3 DIVERSIONS (TO-FROM) OF ACREAGES AND BUSHELS CONDITIONAL ON THE CLOSING OF SPECIFIED DELIVERY POINTS, BASIS 1969-70 (concluded)

To Dive	ersion Point	Percent	Acres Diverted	Bus	hels Diverted
	losed Point	Diverted	1969-70	1969-70	Ten-Year Average 1960-61 to 1969-70
To: From:	64 Turtleford 61 Glaslyn 26 Fairholme 43 Livelong	7.6 26.8 65.6	7,137 25,147 61,686	25,578 80,686 147,616	26,102 74,139 144,708
	<u>Total</u>	100.0	93,970	255,880	244,949
To: From:	47 Speers 14 Brada 53 Rabbit Lake 19 Redfield 39 Mullingar 34 Alticane 48 Mayfair 23 Keatley	0.3 1.1 1.3 7.7 18.5 33.4 37.7	160 679 832 4,754 11,448 20,631 23,301	980 4,142 3,013 18,015 42,370 92,188 136,865	1,193 2,800 2,937 22,727 52,623 77,682 139,878
	<u>Total</u>	100.0	61,805	297,580	299,840
To: From:	16 Iffley 14 Brada 39 Mullingar 53 Rabbit Lake 48 Mayfair 19 Redfield 18 Hatherleigh 11 Scentgrass 38 Whitkow	0.9 4.6 9.8 11.0 13.6 21.3 17.6 21.2	798 4,233 8,909 9,963 12,331 19,351 15,966 19,316	4,937 16,039 54,358 44,521 44,678 42,470 73,444 72,627	5,966 20,235 36,752 37,516 43,551 47,602 74,761 134,029
	Total_	100.0	90,867	353,074	400,412
To: From:	27 Sandwith 19 Redfield 18 Hatherleigh 38 Whitkow 23 Keatley 48 Mayfair 25 Robinhood 3 Bournemouth 39 Mullingar 35 Glenbush 53 Rabbit Lake	0.3 0.4 0.7 0.9 2.6 4.4 10.9 11.7 13.6 54.5	344 496 816 1,004 3,086 5,093 12,767 13,742 15,900 63,807	1,247 1,089 3,069 5,899 13,792 18,504 61,125 52,068 89,542 389,307	1,215 1,221 5,663 6,029 11,622 18,232 50,080 65,689 89,124 263,217
	Total	100.0	117,055	635,642	512,092
To: From:	46 Medstead 3 Bournemouth 53 Rabbit Lake 26 Fairholme 35 Glenbush 25 Robinhood 61 Glaslyn	0.2 0.5 4.1 13.1 26.4 55.7	327 679 5,501 17,574 35,655 75,138	1,567 4,142 17,650 98,968 129,530 290,358	1,284 2,800 16,218 98,506 127,627 274,818
	Total	100.0	134,874	542,215	521,253
Study A	Area Total		825,854	3,335,381	3,547,417

<sup>\*</sup>In addition to the acreage and bushelage diverted to it from delivery points in the Shellbrook-Turtleford Study Area, Blaine Lake gained an acreage of 15,148, 1969-70 bushelage of 97,537 and ten-year average bushelage of 119,074 from four points in the Rosthern study area which were assumed to be closed.

### Size of Hinterlands Before and After Diversion

Table 4.4 shows expected acreage increases in the hinterlands of those points assumed to remain open. Maymont has the least gain in both absolute and relative terms, 674 acres or 1.3 percent. Medstead makes the greatest absolute gain, 134,874 acres, with Sandwith having the greatest relative increase, 469.9 percent. Acreage diversion increases the average size of all 25 diversion points by 36.3 percent.

TABLE 4.4 SIZE OF HINTERLANDS BEFORE AND AFTER DIVERSION, BASIS 1969-70

Diversion Point	Before Diversion Original Size 1969-70	Acreage Increase	After Diversion Enlarged Size	Percent Increase
	- acres -		- acres -	
49 Maymont 41 Parkside 22 Cavalier 58 Edam 30 Prince 55 Debden 37 Mont Nebo 20 Hamlin 33 Ruddell 60 Canwood 50 Mervin 66 Spiritwood 56 Leoville 69 North Battleford 68 Meadow Lake * Blaine Lake 45 Krydor 32 Denholm 62 Hafford 31 Richard 64 Turtleford 47 Speers 16 Iffley 27 Sandwith 46 Medstead	53,270 58,567 48,965 116,594 65,196 130,035 31,676 54,635 23,266 150,386 64,947 144,411 82,639 96,048 408,692 126,732 74,240 61,398 142,685 58,228 107,834 53,784 20,833 24,909 77,190	674 2,433 3,206 4,588 7,968 5,959 10,341 7,813 8,632 10,636 19,723 16,358 18,208 10,859 58,405 11,235 14,042 27,069 39,740 49,394 93,970 61,805 90,867 117,055 134,874	53,944 61,000 52,171 121,182 73,164 135,994 42,017 62,448 31,898 161,022 84,670 160,769 100,847 106,907 467,097 137,967 88,282 88,467 182,425 107,622 201,804 115,589 111,700 141,964 212,064	1.3 4.2 6.6 3.9 12.2 4.6 32.7 14.3 37.1 7.1 30.4 11.3 22.0 11.3 14.3 8.9 18.9 44.1 27.9 84.8 87.1 114.9 436.2 469.9 174.7
Study Area Total	2,277,160	825,854	3,103,014 <sup>a</sup>	36.3

<sup>\*</sup>Blaine Lake gained a total of 26,383 acres or 20.8 percent: 11,235 acres or 8.9 percent from the Shellbrook-Turtleford region and 15,148 acres or 11.9 percent from the Rosthern region.

<sup>&</sup>lt;sup>a</sup>This total accounts only for points affected by diversion in the Shellbrook-Turtleford Study Region with the addition of the greater town of Blaine Lake which is located in the Rosthern Study Region.

# Throughput Ratios Before and After Diversion

Rationalization of the present system of grain collection assumes the closure of 26 points in the Shellbrook-Turtleford area and the consequent reduction of elevator capacity by 2,157,200 bushels or 20 percent. Provided that no further storage is built, the throughput ratios expected to result from diversion are given in Table  $4.5.^{7}$ 

Twenty-five delivery points are deemed to be affected by rationalization. For the period from 1960-61 to 1969-70, 1 of these points had a throughput ratio of less than 1.0, 15 points had ratios from 1.0 to 1.9, 7 points were from 2.0 to 2.9 and 2 points had ratios of 3.0 or more. After diversion, it is estimated that ratios will be below 2.0 at only 8 points, from 2.0 to 2.9 at another 8 points, and 3.0 or more at the remaining 9 points. On the basis of 1969-70, the highest ratio, 13.0, occurs at Sandwith and represents an increase of 10 times the ratio before diversion. Based on the ten-year average, rationalization should raise the throughput ratio for the study area from 1.7 to 2.2.

Given their present elevator facilities, Iffley and Sandwith would likely experience some difficulty in handling the additional throughput after diversion. For example, to attain a throughput ratio of 10.5 at Sandwith, where the present capacity is 56,000 bushels, that point would need an annual turnover of 588,000 bushels or a total of 294 boxcars. This would require the local grain elevator to load an average of about 6 boxcars each week of the year. Facilities at Medstead, however, would handle the additional throughput more readily as a new elevator, erected there in 1970, increased the storage capacity from 69,000 bushels to 112,000 bushels (Table 3.5). After diversion, based on a 1969-70 capacity of 69,000 bushels, the throughput ratio was 10.7, but based on the new capacity of 112,000 bushels, the throughput ratio is only 6.6.

<sup>&</sup>lt;sup>1</sup>Throughput ratios for all delivery points before diversion are shown in Table 3.7.

TABLE 4.5 THROUGHPUT RATIOS BY DELIVERY POINT BEFORE AND AFTER DIVERSION, BASIS 1969-70 AND PREVIOUS TEN-YEAR AVERAGE

	Before D	iversion	_After D	iversion
Diversion Point	Actual 1969-70	Ten-Year Average 1960-61 to 1969-70	1969-70	Ten-Year Average 1960-61 to 1969-70
Open Points Unaffect 24 Bapaume 28 Mildred 36 Fielding 40 Holbein 44 Vawn 51 Meota 52 Shell Lake 54 Marcelin 57 Borden 59 Radisson 63 Big River 65 Leask 67 Shellbrook	3.7 1.8 2.3 2.5 1.6 1.0 2.3 1.2 1.6 1.9 2.1	2.1 1.7 2.2 1.8 1.6 1.5 2.1 1.2 1.5 1.8 2.4 1.6 1.3	3.7 1.8 2.3 2.5 1.6 1.0 2.3 1.2 1.6 1.9 2.1	2.1 1.7 2.2 1.8 1.6 1.5 2.1 1.2 1.5 1.8 2.4 1.6
Open Points Affecte 49 Maymont 41 Parkside 22 Cavalier 58 Edam 30 Prince 55 Debden 37 Mont Nebo 20 Hamlin 33 Ruddell 60 Canwood 50 Mervin 66 Spiritwood 56 Leoville 69 North Battlefor 68 Meadow Lake * Blaine Lake 45 Krydor 32 Denholm 62 Hafford 31 Richard 64 Turtleford 47 Speers	1.8 1.6 1.8 2.8 2.3 2.0 0.9 2.9 1.6 2.1 3.0 2.0 2.7	2.0 1.5 1.8 2.6 2.2 1.6 0.9 2.7 1.6 1.7 3.0 1.5 2.6 1.7 1.7 1.7 1.7	1.9 1.6 1.9 2.9 2.6 2.2 1.1 3.1 2.3 2.3 3.7 2.3 2.8 2.3 1.9 1.8 2.1 3.2 3.5 2.9 3.1 2.6	2.0 1.5 1.9 2.7 2.4 1.8 1.2 3.0 2.4 1.9 3.7 1.7 3.2 2.0 1.8 1.9 2.5 3.2 3.2 3.0

See footnotes at end of table

TABLE 4.5 THROUGHPUT RATIOS BY DELIVERY POINT BEFORE AND AFTER DIVERSION, BASIS 1969-70 AND PREVIOUS TEN-YEAR AVERAGE

	Before D	Before Diversion		version
		Ten-Year		Ten-Year
	Actual	Average 1960-61 to		Average 1960-61 to
Diversion Point	1969-70	1969-70	1969-70	1969-70
16 Iffley 27 Sandwith 46 Medstead	1.0 1.6 3.8	1.4 1.3 3.2	6.4 13.0 11.6	7.5 10.5 10.7
Total Study Area	1.8 <sup>a</sup>	1.7 <sup>a</sup>	2.3 <sup>b</sup>	2.2 <sup>b</sup>

<sup>\*</sup>Ratios shown for Blaine Lake are only for bushelages diverted from the Shellbrook-Turtleford Region. The diversion of bushelages from both the Shellbrook-Turtleford Region and the Rosthern Region would have the following effect on the throughput ratio at Blaine Lake:

- (1) A 1969-70 throughput ratio after diversion of 1.9.
- (2) A ten-year average throughput ratio after diversion of 2.2.

"Blaine Lake is included based on bushelages diverted from the Shellbrook-Turtleford Region only.

<sup>&</sup>lt;sup>a</sup>Average throughput ratio of all points open from Table 3.7. Blaine Lake is not included.  $^b$ Blaine Lake is included based on bushelages diverted from the

# Farm to Elevator Hauling Distances Before and After Diversion

Table 4.6 presents a comparison of maximum and average hauling distances before and after diversion both for points assumed to be closed and for points assumed to remain open. The changes in maximum and average mileages due to diversion are also shown.

For the study area as a whole, diversion increased the average farm to elevator hauling distance from 9.32 to 11.44 miles, a difference of 2.12 miles. For those points assumed closed, diversion increased average hauling distance from 6.32 to 15.07 miles, a difference of 8.75 miles. Before diversion the shortest average hauling distance was 3.03 miles at Ordale and the longest average hauling distance was 20.63 at Meadow Lake. For points remaining open after diversion, Fielding had the shortest average hauling distance, 4.51 miles, and Meadow Lake had the longest average hauling distance, 21.96 miles.

Hauling distances increased considerably for nearly all points assumed to be closed.  $^{I}$  The greatest jump occurred at Makwa where the average mileage rose from 7.09 miles to 31.37 miles, an increase of 24.28 miles. The maximum hauling distance for the points assumed to be closed increased from 38 miles to 52 miles.

<sup>&</sup>lt;sup>1</sup>The reason for the slight decrease in the average hauling distance at Scentgrass is that several quarter sections in its hinterland north of Jackfish Lake were diverted to Cavalier when Scentgrass was closed so the original hauling distance to the latter point was accordingly shortened.

The fact that average hauling distances decreased at several of the points remaining open can be explained by the location of the acreages added in relation to the shape of the original hinterlands. Since average hauling distance is an average weighted by the number of quarter sections (see commentary for Table 3.15), adding quarter sections that are closer to a delivery point than some of its original acreage results in the average being pulled downwards.

TABLE 4.6 FARM TO ELEVATOR HAULING DISTANCES BY DELIVERY POINT BEFORE AND AFTER DIVERSION, BASIS 1969-70

	Before L	iversion -70	After Di Basis 1		Cha	nge
Delivery Point	Maximum	Average		Average	Maximum	Average
			- mil	es -		
Points Assumed Closs 18 Hatherleigh 3 Bournemouth 7 Ordale 17 Ranger 12 Polwarth 42 Makwa 26 Fairholme 19 Redfield 34 Alticane 11 Scentgrass 25 Robinhood 39 Mullingar 43 Livelong 35 Glenbush 14 Brada 15 Lilac 48 Mayfair 8 Tallman 38 Whitkow 23 Keatley 53 Rabbit Lake 61 Glaslyn	ed  15 11 6 13 38 25 20 18 18 24 18 20 20 17 32 18 16 15 12 30 31 18	4.18 4.34 3.03 5.63 4.75 7.09 5.88 4.83 5.88 7.05 5.46 6.67 8.53 4.51 5.77 5.32 6.46 5.75 5.41 5.78 7.11	18 17 10 18 12 52 28 23 27 16 23 29 34 17 21 19 27 16 22 20 24 33	8.70 9.70 7.53 10.94 9.05 31.37 19.02 16.48 17.42 6.24 8.64 21.75 18.76 7.31 8.20 8.84 19.61 7.52 13.44 10.98 13.29 18.05	+ 3 + 6 + 4 + 5 -26 +27 + 8 + 5 + 9 - 8 + 5 + 14 0 -11 +11 +10 - 7 +15	+ 4.52 + 5.36 + 4.50 + 5.31 + 4.30 +24.28 +13.14 +11.65 +11.54 - 0.81 + 3.18 +15.08 +10.23 + 2.43 + 3.52 +13.15 + 1.77 + 8.03 + 5.20 + 6.18 +10.34
Sub-Total	38	6.32	52	15.07	+14	+ 8.75
Points Remaining Operate Bapaume 28 Mildred 36 Fielding 40 Holbein 44 Vawn 51 Meota 52 Shell Lake 54 Marcelin 57 Borden 59 Radisson 63 Big River 65 Leask 67 Shellbrook 49 Maymont	21 18 12 38 20 21 18 17 25 17 23 29 37 39	8.13 6.03 4.51 13.54 6.56 8.17 6.91 7.56 10.45 6.68 9.07 10.14 9.87 5.95	21 18 12 38 20 21 18 17 25 17 23 29 37 39	8.13 6.03 4.51 13.54 6.56 8.17 6.91 7.56 10.45 6.68 9.07 10.14 9.87 5.94		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

TABLE 4.6 FARM TO ELEVATOR HAULING DISTANCES BY DELIVERY POINT BEFORE AND AFTER DIVERSION, BASIS 1969-70 (concluded)

Delivery Point	Before D 1969 Maximum	iversion -70 Average	After Di Basis l Maximum	969-70 Average	Cha Maximum	nge Äverage
41 Parkside 22 Cavalier 58 Edam 30 Prince 55 Debden 37 Mont Nebo 20 Hamlin 33 Ruddell 60 Canwood 50 Mervin 66 Spiritwood 56 Leoville 69 North Battleford 68 Meadow Lake * Blaine Lake 45 Krydor 32 Denholm 62 Hafford 31 Richard 64 Turtleford 47 Speers 16 Iffley 27 Sandwith 46 Medstead	24 17 23 25 24 18 50 10 33 18 23 30 40 57 26 19 26 30 36 30 24 26 11	5.58 6.73 8.27 8.32 8.71 4.59 7.87 3.63 10.28 9.32 9.05 7.96 14.32 20.63 9.28 7.35 6.70 10.53 8.23 7.98 5.90 5.50 4.57 7.11	24 17 23 25 24 18 50 10 33 20 29 30 40 57 26 20 26 30 36 34 28 25 34	5.73 7.22 8.59 8.03 8.74 5.33 8.44 4.20 10.13 10.71 9.96 8.39 13.71 21.96 9.13 7.50 7.34 11.98 11.35 13.49 11.40 10.75 11.37 11.51	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	+ 0.15 + 0.49 + 0.32 - 0.29 + 0.03 + 0.74 + 0.57 - 0.15 + 1.39 + 0.91 + 0.43 - 0.61 + 1.33 - 0.15 + 0.15 + 0.64 + 1.45 + 3.12 + 5.51 + 5.50 + 5.25 + 6.80 + 4.40
Total Study Area	57	9.32 <sup>a</sup>	57	11.44 <sup>b</sup>	0	+ 2.12

<sup>\*</sup>Figures for Blaine Lake shown here do not include mileage that town gained from the Rosthern Region. With diversions from both the Shellbrook-Turtleford Region and the Rosthern Region, the average haul at Blaine Lake became 9.84 miles, an increase of 0.56 miles.

<sup>&</sup>lt;sup>a</sup>Blaine Lake is not included.

Blaine Lake is included based on mileage computed from the Shellbrook-Turtleford Region only.

### Number of Permit Holders Before and After Diversion

If the alternative grain collection system assumed in this report materializes, there will be adjustments in the number of permit holders at the delivery points affected. Based on the number of permits issued in 1969-70, estimates have been made of the probable number of permits at points remaining open after diversion (Table 4.7). These estimates were derived from the percentage distribution values of Table 4.2 in the same manner as estimates for acreage and bushelage diversion. It is supposed that no reduction in the number of producers will result from rationalization.

A total of 1,343 permit holders, 20.2 percent of the 6,654 permit holders in the study area, Blaine Lake excluded, would find it necessary to choose an alternate delivery point. Medstead is expected to make the greatest gain with the number of permit holders rising from 117 before diversion to 320 after diversion, a gain of 203. Diversion would increase the number of permit holders by over five times the previous number both at Iffley, 36 to 184, and at Sandwith, 41 to 237.

TABLE 4.7 NUMBER OF PERMIT HOLDERS BY DELIVERY POINT BEFORE AND AFTER DIVERSION, BASIS 1969-70

Delivery Point	Number of Per Before Diversion	mit Holders After Diversion
Points Assumed Closed  18 Hatherleigh 3 Bournemouth 7 Ordale 17 Ranger 12 Polwarth 42 Makwa 26 Fairholme 19 Redfield 34 Alticane 11 Scentgrass 25 Robinhood 39 Mullingar 43 Livelong 35 Glenbush 14 Brada 15 Lilac 48 Mayfair 8 Tallman 38 Whitkow 23 Keatley 53 Rabbit Lake 61 Glaslyn	34 24 32 28 29 105 50 37 54 46 54 49 84 48 37 52 89 51 61 68 147 164	0 0 0 0 0 0 0 0 0 0 0 0 0
Points Remaining Open 24 Bapaume 28 Mildred 36 Fielding 40 Holbein 44 Vawn 51 Meota 52 Shell Lake 54 Marcelin 57 Borden 59 Radisson 63 Big River 65 Leask 67 Shellbrook 49 Maymont 41 Parkside 22 Cavalier	81 40 53 192 86 36 175 137 188 133 110 237 260 87 109 66	81 40 53 192 86 36 175 137 188 133 110 237 260 88 114 71

TABLE 4.7 NUMBER OF PERMIT HOLDERS BY DELIVERY POINT BEFORE AND AFTER DIVERSION, BASIS 1969-70 (concluded)

	Number of Pe Before	ermit Holders
Delivery Point	Diversion	After Diversion
	2176131011	DIVELZION
58 Edam	144	151
30 Prince	99	112
55 Debden	203	216
37 Mont Nebo	40	61
20 Hamlin	87	101
33 Ruddell	35	49
60 Canwood	276	298
50 Mervin	79	109
66 Spiritwood	233	261
56 Leoville	131	159
69 North Battleford	148	163
68 Meadow Lake	748	853
* Blaine Lake	270	294
45 Krydor	185	215
32 Denholm	91	130
62 Hafford	304	373
31 Richard	93	170
64 Turtleford	142	272
47 Speers	89	195
16 Iffley	36	184
27 Sandwith	41	237
46 Medstead	117	. 320
Total Study Area	6,924 <sup>a</sup>	6,924 <sup>a</sup>

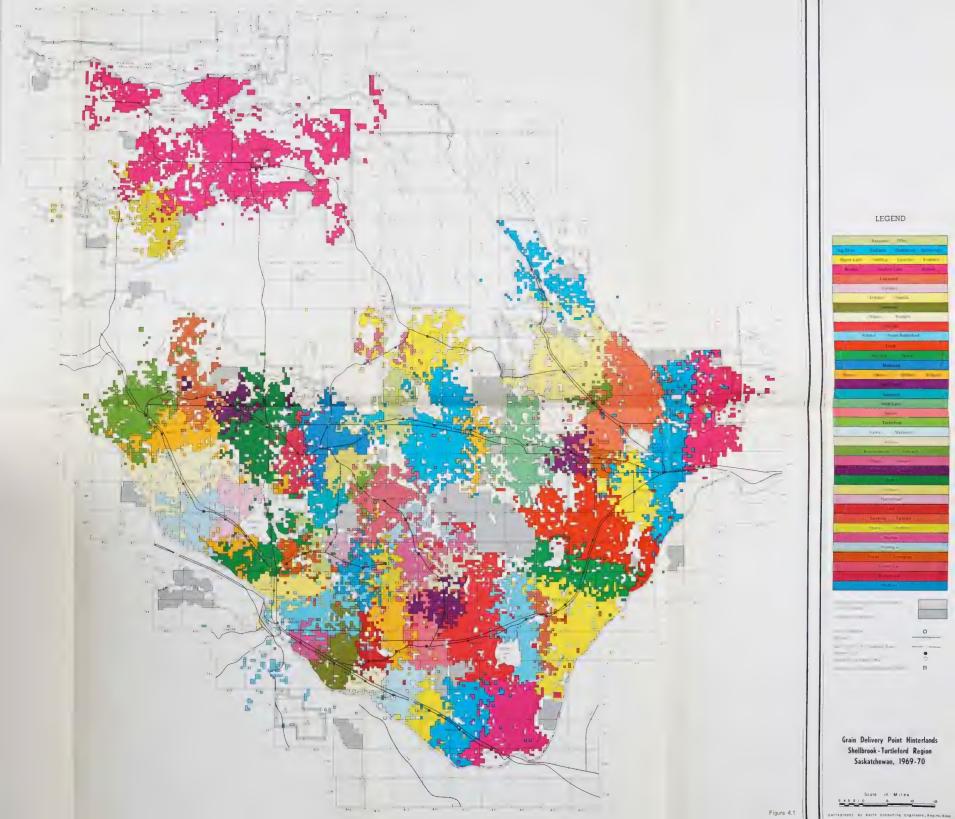
<sup>\*</sup>Blaine Lake received an additional 32 permit holders from points in the Rosthern Study area, making a total of 326 permit holders for that delivery point after diversion.

<sup>&</sup>lt;sup>a</sup>Blaine Lake included.













#### LEGEND





Probable Grain Delivery Point Hinterlands, Assuming Specified Delivery Points Closed, Shellbrook-Turtleford Region, Saskatchewan Basis 1969-70





#### PART V

#### REGULATION OF THE GRAIN INDUSTRY

There is an inherent unfairness in a situation where a large number of sellers face a few buyers. In Western Canada the existence of such a situation has led to the very high degree of regulation which characterizes the grain marketing industry today: grain elevators are regulated by the Canadian Grain Commission; grain marketers including the producers are regulated by the Canadian Wheat Board; and grain carriers—railways, truckers and lake vessel operators—are regulated by the Canadian Transport Commission as well as by the Canadian Grain Commission and the Canadian Wheat Board.

The following outline of the activity of the above regulatory bodies is not intended to be exhaustive by any means; however, the most important regulations applying to producers, elevator operators and railways are covered. Because these regulations significantly influence the welfare of prairie farms and communities, they are complementary to the Prairie Regional Studies in Economic Geography.

#### Canada Grain Act, Revised Statutes of Canada 1970 Ch. G-16

The Canadian Grain Commission superseded the Board of Grain Commissioners for Canada on April 1, 1971, by virtue of an amended Canada Grain Act passed by the federal government in 1970. The definition of an elevator is one of several important changes in the Act (Section 2). For licensing purposes it is no longer required that an elevator be situated on a railway right-of-way. All premises which receive, weigh, elevate, store and discharge bulk grain into a transport conveyance and which meet certain construction standards specified by the Commission may be licensed to handle western grain.

For regulatory purposes the once familiar term, "country elevator", has been changed to "primary elevator" and is now defined as "an elevator the principal use of which is the receiving of grain directly from producers".

All costs of the Commission are borne by the federal treasury. The commissioners and their staff are public servants.

In the interests of the producers, the Commission establishes and maintains standards of quality for Canadian grain. Any grade or dockage dispute between producer and buyer is settled by sending a small sample of the grain to the Commission. Elevator operators must give farmers every opportunity to verify the weights of their grain.

The Commission may consent to the mixing of different grades of grain in terminal and transfer elevators. Without this consent no mixing is permitted. The Commission periodically checks the inventory of grain in all elevators.

Only a public carrier may transport grain described by an official grade name across a provincial boundary. Only a public carrier may transport grain from Western Canada to Eastern Canada or out of Canada. Public carriers may not deliver grain to primary elevators without the consent of the Commission.

Grain producers who qualify to ship a complete carload of grain to a terminal or a transfer elevator may have a rail car allocated to them for this purpose by the Commission. Where it is in the public interest so to do, the federal cabinet may order a railway company to spot cars for transporting grain at any point where service is provided. In such cases the grain producer has the right to select the elevator of his choice or to load directly into the rail car.

The car order book is no longer used as the legal instrument to ensure equity in rail car supply.

To provide for the orderly movement of grain, the Commission may issue regulations governing the activities of all licensed elevators.

The Commission may set maximum freight rates for the carriage of Canadian grain by lake vessel between points in Canada. This authority is given to the Commission by the Inland Water Freight Rates Act.

#### The Canadian Wheat Board Act, Revised Statutes of Canada 1970 Ch. C-12

The Canadian Wheat Board was created by the federal government in 1935 when the three prairie wheat pools, although they were backed by their respective provincial governments, could not withstand the tremendous financial pressures resulting from a great surplus of wheat on world markets and prices that were below production costs for wheat that was sold. Today the Board dominates the marketing of grain in Western Canada and makes an impact on the production of most crops grown there.

The Board consists of five commissioners appointed by the federal cabinet. Board members and support staff receive their salaries and wages from the proceeds of grain sold by farmers. In fact all the cost of operating the Board is borne by the grain producers; however, they receive some assistance from the federal treasury for part of the cost of storing wheat in commercial elevators. (See outline of the Temporary Wheat Reserves Act which follows).

The Board has permanent offices in Winnipeg, Vancouver, Montreal, Tokyo and London, England. It uses the established grain export companies to make sales on an agency basis. There are 25 firms which export grain for the Board via the Lakehead and the eastern route and 17 firms which handle Board grain via ports on the Pacific Coast.

The Board has no assets of its own. It has no funds; it retains no profits. The money to pay for wheat, durum wheat, oats and barley delivered by the producers is obtained by borrowing from the chartered banks. The cost of this money is paid by the producers. The Board does not own or operate grain handling, storage or transportation facilities. It contracts with licensed primary elevator operators to act as buying and forwarding agents.

The object of the Board is to market grain in an orderly manner. This marketing function is limited to interprovincial and export trade. Grain grown and marketed within a province does not come under the jurisdiction of the Board although its authority does extend to all elevators, flour mills, feed mills, feed warehouses and seed cleaning mills.

The federal cabinet appoints an advisory committee, comprised of eleven members, at least six of them representing wheat producers.

Although the federal cabinet has authority to direct the Board how it is to operate, in practice it has a great deal of autonomy.

Elevators are operated for and on behalf of the Board. Only a Board agent may operate an elevator unless the Board excepts that elevator from provisions of the Canadian Wheat Board Act.

The Board has the authority to limit deliveries of grain by individual producers. This is accomplished by the issuing of permit books, by the fixing of delivery quotas at specified delivery points, and by some special delivery quotas for selected grain.

A bona fide grain producer is entitled to have a permit book issued to him by the Board. "Producer" includes the actual producer and any person entitled to the grain such as a landlord, a vendor or a mortgagee. The actual producer of the grain has the prior right to possession of the permit book and only one permit book may be issued per farm. Where two or more producers are entitled to the grain from a farm, no one of them may deliver in excess of his proper share of the delivery quota.

Only a producer may deliver grain to a licensed elevator subject to the provisions that he holds a permit book and that he goes to one of the two delivery points named in his permit book. While the Board has authority to designate delivery points, usually the producers are permitted to choose them.

The quantity of grain accepted from producers by elevator companies must not exceed the quota established at the time of delivery for the kind of grain being offered and for the point stipulated. A record of all deliveries must be entered in permit books.

The Board must buy whatever wheat, durum wheat, oats, and barley is offered by a bona fide producer provided that he has complied with all the orders and regulations of the Board. It must pay the appropriate initial payment on delivery. Generally this is done by the elevator operator acting on behalf of the Board. Payment for his costs is made upon the grain being delivered to the Board at a terminal or mill elevator.

A record of each grain delivery and the payment made, is entered in an accounting pool along with similar records for all other grain of like kind and grade marketed in the same crop year. Every producer shares in an equitable distribution of surplus funds in the pool at the end of its accounting period which coincides with the crop year.

Only grain taken into an elevator in accordance with orders and regulations of the Board may be loaded into a railway car.

The Board has the authority to order grain by grade loaded from elevators into railway cars or lake vessels. Grain is thus shipped out of country elevators according to orders issued by the Board to its agents, the elevator operators. The Board also has authority to prohibit the movement of any kind of grain from an elevator. It may allocate railway cars to specific persons or elevators at specific delivery points. In the ordinary course of events, however, it refrains from being so specific, preferring to allocate shipping orders and cars en masse to its agents for the movement of grain from elevators situated in specified loading blocks.

At the present time only grain produced in the so-called designated area comes under the jurisdiction of the Board, but this amounts to most of the grain produced in Canada. The designated area comprises all of Manitoba, Saskatchewan and Alberta, a small area in the Rainy River region of Ontario near the Manitoba border, and the Peace River and Creston-Wynndel areas of British Columbia.

After the Board has received payment for the wheat, durum wheat, oats and barley delivered to it, all charges against those crops are deducted before the remaining money is distributed in the form of a final payment to producers. These cheques are mailed from six to nine months after the pool has been closed for deliveries at the end of the crop year. The amount of the final payment depends on the grade of the grain and the price per bushel obtained by the Board.

The Board has authority to prohibit the export or import of wheat, durum wheat, oats and barley or any of their products. It may also prohibit the transportation of these grains from one province to another. Only the

Board may contract for the sale of these grains if they are destined to any place outside the province in which they are grown. It may grant licenses for wheat, durum wheat, oats and barley to be exported, imported or moved across provincial boundaries.

#### Temporary Wheat Reserves Act, Statutes of Canada 1956 Ch. 2

According to the Minister of Trade and Commerce at the time, this Act was passed by the government of Canada in 1956 in lieu of establishing a two-price system for grain.

The legislation makes the federal government responsible for paying the costs of storage and bank interest for 365 days on wheat and durum wheat in excess of 178 million bushels that is held by the Canadian Wheat Board and that is in commercial storage at the opening of business on August 1, the start of each crop year. The rates paid per bushel are those prevailing on July 31, the last day of the previous crop year.

The purpose of the Act is to save the Canadian Wheat Board and thereby producers in Western Canada from the payment of carrying costs on abnormally large stocks of wheat and durum wheat. Without the Act the Wheat Board might be forced into panic selling in violation of its duty to market wheat in an orderly manner.

The federal treasury each month pays to the Canadian Wheat Board one-twelfth of the carrying charges on the excess stocks. This amount is prorated in the accounting pools and it is eventually paid out to producers as part of the final payment.

If the Wheat Board does not hold more than 178 million bushels at the beginning of a crop year, no payments are to be made for that or any following crop year. The Temporary Wheat Reserves Act would become null and void. This is why the Act has the word "temporary" in its title.

### National Transportation Act, Revised Statutes of Canada 1970 Ch. N-17

The National Transportation Act became law in 1967 with the declaration that "an economic and efficient transportation system, making the best use of all available modes of transportation at the lowest total cost, is essential to protect the interests of the users of transportation and to maintain the economic well-being and growth of Canada ...".

The Act dissolved the Board of Transport Commissioners for Canada and established the Canadian Transport Commission comprised of seventeen members. Under the new Commission several committees were formed. The one that affects grain production and marketing in Western Canada is the Railway Transport Committee. It has five members.

The commissioners are appointed by the government of Canada. They and their staff are federal civil servants.

The Commission administers the Railway Act. It regulates and licenses any mode of transport in Canada; it controls rates and tariffs and it dispenses transport subsidies voted by Parliament.

Any person believing that a particular rate set by a carrier is prejudicial to the public interest may apply to the Commission for permission to appeal the rate. If an appeal is allowed and hearings are held, representatives of shippers, consignees, municipal governments and provincial governments are entitled to appear. Should the Commission be convinced that the rate in question is against the public interest, it may make an order requiring the carrier to change the rate.

The greatest impact of the National Transportation Act on the grain production and marketing system comes from provisions covering the abandon-ment of uneconomic branch railway lines. The definition of branch lines includes all subsidiary, secondary, local or feeder lines and segments of branch lines.

The Commission sets the rules governing the filing of abandonment applications and the determination of whether or not the branch line in the application is truly eligible for abandonment on economic grounds.

The Commission holds public hearings on the question of branch line abandonment and listens to all persons who wish to present their views. On the basis of the application and the hearing, the Commission determines if the branch line is uneconomic, if it is likely to remain so and if it should be abandoned. Only lines that incurred an operating loss in the last accounting year may be permitted to discontinue.

A hearing may cover several applications at the same time if the branch lines are in the same or adjoining areas. The Commission has authority to decide the order in which applications are considered. It may, however, ask the railway company for its order of preference.

In determining whether or not a branch line may be abandoned, some factors considered by the Commission are as follows: the public interest; the actual losses incurred; the alternative transportation facilities; the adjustment period required; the disruption to the economy of the communities and the area; the effect on other lines and other carriers; the feasibility of maintaining the line or any part of it by a) changing the method of operation, b) inter-connecting with another line, c) sale or lease of the line or part of it to another railway company, d) exchanging running rights, and e) constructing connecting lines with lines of another company; the known or potential resources of the area; the seasonal restrictions on other forms of transport; and the future transportation needs of the area.

When the Commission decides that a branch line or a segment of it is to be abandoned, a closing date is set from one month to five years after the issuance of the abandonment order. The railway company must cease its operation of the branch line on the specified date.

Where the Commission is not satisfied that a line should be abandoned, it orders the railway to continue its operation; however, the abandonment application is reconsidered periodically in the light of any new conditions that may arise.

Even though no applications for abandonment of certain branch lines have been filed, the Commission may recommend the rationalization of railway lines through the exchange of branch lines between companies, through the exchange of running rights on other lines and through the connecting of lines of rival companies. The Commission may also recommend to the rail companies that applications for abandonment of branch lines be filed.

Where the Commission has determined that a branch line is uneconomic but the line continues to operate, the railway company is entitled to claim for the actual loss accruing to that line in each fiscal year. The Commission in such cases examines the figures in the claim and recommends to the Minister of Finance that the particular rail company be paid the verified amount of the loss.

The federal cabinet may designate specific branch lines that may not be abandoned for fixed periods of time. This was done for the so-called protected lines that may not be closed before January 1, 1975. If losses are incurred in the operation of such lines, a railway company may claim for losses even though no application has been filed. On the recommendation of the Commission, the claim may be paid.

The National Transportation Act confirms the statutory freight rates on grain set by the "Act to Authorize a Subsidy for a Railroad through the Crows Nest Pass" S.C. 1897 Ch. 5. For the first time statutory freight rates are established on grain moving by rail from prairie points to the Pacific Coast ports and Churchill for export at the levels prevailing on December 31, 1966. To change these rates now requires an Act of Parliament. Before the National Transportation Act was passed, the export freight rates to the Pacific were set by an order of the Board of Transport Commissioners and the level of these rates was established having regard to the Crows Nest rates on grain moving eastward to the Lakehead.





## FROM DELIVERY POINTS BEFORE AND AFTER DIVERSION

Table A.1 shows the estimated number of quarter sections in each hinterland and their distances to a delivery point both before and after diversion. The number of quarter sections was obtained from hinterlands plotted on the basis of 1969-70 and the distance for each quarter section was measured in units of 1.0 mile after the manner described in the commentary for Table 3.15.

Table A.2 shows the estimated number of permit holders by their distance from a delivery point and it was derived from Table A.1 by converting quarter sections to number of permits. In both tables the delivery points are in two groups; namely points assumed closed and points remaining open. This ordering is the same as Part IV.

Taking Lilac as an example, Table A.1 shows that in 1969-70 this point had 190 quarter sections in its hinterland and that 40 of them were within a distance of 2 miles. Lilac was assumed closed and its acreage diverted to the neighboring points of Maymont, Ruddell, Richard and Denholm (Table 4.2). The distance of each quarter section from its new delivery point was then measured and only 3 quarter sections of the original Lilac hinterland remained within 2 miles of a delivery point. Since each Lilac permit holder farms an average of 3.84 quarter sections, 40 quarter sections represent about 10.5 permit holders and 3 quarter sections represent less than 1.0 permit holders (Table A.2).

From Table A.2 it is not possible to infer that the permit holders hauling a certain distance before closure are hauling the same distance after closure. For instance: it cannot be determined whether the 3.0 Lilac permit holders hauling 11-12 miles before diversion are among the 6.5 permit holders hauling 11-12 miles after diversion.

To assist further in the interpretation of these tables, the following relationships are noted:

- 1. The subtotals before diversion of the points assumed closed plus the subtotals before diversion of the points remaining open equal the study area totals before diversion.
- 2. The subtotals after diversion of the points assumed closed plus the subtotals before diversion of the points remaining open equal the subtotals after diversion of the points remaining open.
- 3. Since the points remaining open after diversion account for all quarter sections (and all permit holders) their subtotals after diversion equal the study area totals after diversion.

TABLE A.1 ESTIMATED NUMBER OF QUARTER SECTIONS AND DISTANCE FROM DELIVERY POINT BEFORE AND AFTER DIVERSION, SHELLBROOK-TURTLEFORD REGION, 1969-70

	Average No. of Quarters Per Permita	Delivery Point	~ ∞ ~l	w ∞ 4	വയവ	~∞∞	0 % 0	L % Z	14 × 13	15 20	17 8 18	stanc 19 & 20	e in 21 8 22	Distance in miles 7 19 21 23 8 8 8 8 8 20 22 24	25 & 26	27 & 28	29 30	31 88 32	3,4	35 35	37 & 38	39 C	Over 40b	Total No. of Quarters
18 Hatherleigh   18 Hatherleigh   18 Hatherleigh   19 H		Points Assumed Closed									umber	of	uarte		ions	1								
3 Bournemouth Service Diversion	3,59	18 Hatherleigh Before Diversion After Diversion	32	41	29	15 36	37	L 4	0 9	<b>-</b> ∞	-													121
The parameter of the	3.41		21	25	∞ ∞	11	19	17	7	7	-													80
17 Ranger   18 Refree Diversion   7   28   19   20   11   1   1   7   7   1   1   1   1	3.13		39	44	31	37	3]																	66
12 Polyarth Before Diversion	3,23		7	28	15	20	112	1 20	7	17	~													87
42 Makwa       Before Diversion       29       77       79       68       45       23       5       9       2       4 <t< td=""><td>2.69</td><td></td><td>26</td><td>21</td><td>26</td><td>31</td><td>39</td><td>12</td><td>0</td><td>-</td><td>0</td><td>0</td><td>0</td><td>-</td><td>0</td><td>0</td><td>0</td><td>00</td><td>0</td><td>0</td><td>_</td><td></td><td></td><td>833</td></t<>	2.69		26	21	26	31	39	12	0	-	0	0	0	-	0	0	0	00	0	0	_			833
26 Fairholme Before Diversion       35 62 66 22 4 7 17 9 17 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3.44		59	77	79	89	45	23	വ	60	22	40	4 -	4 4	1 25	53							_	350
19 Redfield   Before Diversion   29   59   46   27   6   2   50   61   26   3   1	4.53		35	62	99	22 0	40	3	17	9 40	35	39	34	24	16	∞								224
37 34 Alticane Before Diversion After Diversion 99 11 Scentgrass Before Diversion 68 25 Robinhood Before Diversion 19 51 52 19 13 7 2 16 15 16 16 16 16 16 16 16 16 16 16 16 16 16	4.66		29	52	46	27	90	2 8	22	200	- 59	26	m	-										172
13 Scentgrass   Before Diversion   25   44   37   24   16   12   5   0   2   3   7   2   3   4   4   5   5   19   13   7   2   16   3   7   5   5   5   5   5   5   5   5   5	3.37		26	20	36	16	38	9 %	24	44	3	39	19	0	0	2								171
25 Robinhood Before Diversion 38 70 53 52 25 3 4 2 1 . After Diversion 18 34 67 58 54 13 2 1 0 0	3,99		25	44	37	19	13	12	12 07	16	2	m	7	4										179
	4.68		80	70	34	52	22	3	4 5 5	2.2		. 0	0	_										248

ESTIMATED NUMBER OF QUARTER SECTIONS AND DISTANCE FROM DELIVERY POINT BEFORE AND AFTER DIVERSION, SHELLBROOK-TURTLEFORD REGION, 1969-70 (continued) TABLE A.1

										Dig	tance	u ui c	milec									
Average No. of Quarters Per Permita	Delivery Point	<b>- ∞</b> ∨	w ≈ 4	മെയ	~ ∞ ∞	o ≈ 0	L 02 Z	€ × 4	ا ا م م	77 8 8	19 21 8 8 20 22	21 & 22	ī	25 26	27 28 28	29 3 30 3	31 3 38 3	33 34	35 37	37 3 & 4	39 & 0ver 40 40 <sup>5</sup>	Total No. of Quarters
									-	number	of	quarter	section	ions	ı							
3.87	39 Mullingar Before Diversion After Diversion	19	20	38	14	22	23	10	7 33	1 20	1 46	38	33	20	17	2						181
4.78	43 Livelong Before Diversion After Diversion	46	89	70	45	34	27	29	33	23	13	32	30	32	. 92	19	0,	m				400
4.36	35 Glenbush Before Diversion After Diversion	44	63	60	25	38	19	0 4	00													202
4.63	14 Brada Before Diversion After Diversion	44	47	44	16	3 47	ოო	00	00	00	0 9	- 2	22	0	_	0	S					169
3.84	15 Lilac Before Diversion After Diversion	40	55	38	26 44	14	11	3 20	13.2		2											190
3.91	48 Mayfair Before Diversion After Diversion	35	98	89	36	2 <b>6</b> 5	31	28	32	64	79	99	57	12	_							336 336
2.88	8 Tallman Before Diversion After Diversion	30	23 88	31	34	71	15	10	7 2													148
3,53	38 Whitkow Before Diversion After Diversion	33	54	33	44	20 26	10	22	29	22	Ξ	2										213
3.70	23 Keatley Before Diversion After Diversion	39	73	50	48	20	73	32	17	- ∞	2 2	0	-	0	0	വ						243 243
3.61	53 Rabbit Lake Before Diversion After Diversion	45	94	115	101	76	80	20	10	63	35	0 %	64	-	0	2	2					512
3.87	61 Glaslyn Before Diversion After Diversion	41	85	114	130	119	69	40 95	16	125	63	99	42	19	14	20	7	9				620
																					-	-

TABLE A.1 ESTIMATED NUMBER OF QUARTER SECTIONS AND DISTANCE FROM DELIVERY POINT BEFORE AND AFTER DIVERSION, SHELLBROOK-TURTLEFORD REGION, 1969-70 (continued)

Average No. of Quarters	Delivery Point	~ ∞ ~	w∞4	യയവ	~ ∞5 ∞	0 % 0	11 22	13	15 20	17 8 18	istand 19 & 20	Distance in 1 7 19 21 8 & & 8 20 22	miles 23 & 24	25 26	27 & 28	29 8 30	31 32	33 88 34	35	37 88	39 40	Over 40b	Total No. of Quarters
	Subtotal of Points Assumed Closs Before Diversion 723 12 After Diversion 28 1	umed C1 723 28	34 38	1126	762 515	481	302 504	175	107	47 505	of 25 403	quarter 12 258 2	O	sections 8 2 04 124	- 121	5 97	73	09	0 0 37	1 25	23	Ξ	5,028 5,028
	Points Remaining Open																						
4.25	24 Bapaume Before Diversion After Diversion	20	52.52	57	99	51	45	∞ ∞	10		00	សល											327 327
4.36	28 Mildred Before Diversion After Diversion	29	37	42	16	13	12	==	2.2														163 163
4.61	36 Fielding Before Diversion After Diversion	44 44	84	73	28	9 9	ນນ																240 240
4.01	40 Holbein Before Diversion After Diversion	21	52	50	64	65	74	50	48	57	55	62	62	45	m m	ro ro	66	m m	00				726 726
5.08	44 Vawn Before Diversion After Diversion	45 45	95	71	72	62	35	9 9	44	22	9 9												398 398
4.69	51 Meota Before Diversion After Diversion	16	333	24	32	24	7	ကက	133	000	7												170
3, 57	52 Shell Lake Before Diversion After Diversion	29	60 00	110	127	114	78	34	വവ	∞ ∞													598 598
3.64	54 Marcelin Before Diversion After Diversion	38 8	88 83	88 80	76	72	65	47	00														480
3.63	57 Borden Before Diversion After Diversion	30	72	84	76	84	94	77	61	44	27	12	7	22									029
3.76	59 Radisson Before Diversion After Diversion	37	104	118	103	09	42	133	∞ ∞	വവ													490
See footnotes at	s at end of table																					(cont	(continued)

ESTIMATED NUMBER OF QUARTER SECTIONS AND DISTANCE FROM DELIVERY POINT BEFORE AND AFTER DIVERSION, SHELLBROOK-TURTLEFORD REGION, 1969-70 (continued) TABLE A.1

Average No. of Quarters Per Permita	Delivery Point	L & C	w ≈ 4	0 % 02	N ∞2 00	0 % 0	11 8	13 × 41	ارت م 1	17 8 18	stanc 19 & 20	21 8 22 22	Distance in miles 7 19 21 23 8 8 8 8 8 8 8 8 8		27 29 & & & 28 30	9 31 8 8 0 32	33	35	37 % % % % % % % % % % % % % % % % % % %	39	0ver 40b		Total No. of Ouarters
									1	number	of q	quarter	r section	ons								1	
3.01	63 Big River Before Diversion After Diversion	21	48	57	48 8	<b>58</b> 58	80 80 80 br>80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 8	3 <b>4</b>	29	13	00	4 4										mm	330 330
4.26	65 Leask Before Diversion After Diversion	45	103	126	147	135	124	102	80	70	40	10	∞ ∞	00		m m						00	994 994
3.63	67 Shellbrook Before Diversion After Diversion	47	66	119	97	∞ 70 °C	84	62	48	43	46	46	8 8	26 1	44	7 5	m m					0000	871 871
3,85	49 Maymont Before Diversion After Diversion	44	96	93	47	27	00	വവ	00	00	00	00	00	00	00	00	21.02	00	00				327 331
3.36	41 Parkside Before Diversion After Diversion	45	86	91	88	33	66			00	00		22									n n	367 382
4.63	22 Cavalier Before Diversion After Diversion	36	49	67	65	40	28	12	17													nn	303 323
5.05	58 Edam Before Diversion After Diversion	42	91	112	134	132	100	65	34	4 21	00	00	2.2									7	716 744
4.17	30 Prince Before Diversion After Diversion	44	79	95	53	47	36	25	15	15	20	נט נט	44									44	409 459
4.06	55 Debden Before Diversion After Diversion	42	95	150	161	100	70	65	59	34	∞ ∞	44	ოო									7	791 828
4.49	37 Mont Nebo Before Diversion After Diversion	34	99	45	25	18	00	44	00													. 2	176 240
3.98	20 Hamlin Before Diversion After Diversion	44	71	61	50	43	29	13	0 %	22		00	7	9 9	7 7	44	00	00	00	00		ന്ന്	339 388
See footnotes	See footnotes at end of table																				00)	(continued)	(P

ESTIMATED NUMBER OF QUARTER SECTIONS AND DISTANCE FROM DELIVERY POINT BEFORE AND AFTER DIVERSION, SHELLBROOK-TURTLEFORD REGION, 1969-70 (continued) TABLE A.1

Average No. of Quarters	Delivery Point	~ ∞ ~	W 00 4	വ ടം വ	<b>~</b> ∞∞		- × 5	E ∞ 4	10 × 51	17 17 18	Distance in r 7 19 21 8 & & 8 20 22	e in 22	miles 23 & 24	2 % S	27 & 28	29 30 30	32	33 33 34 3	35 3	37 3	39 0 40	0ver 40b (	Total No. of Quarters
4.13	33 Ruddell Before Diversion After Diversion	41	63	28	4 [2	വവ			1	number	of	quarter	s o	tions	1							manager of the state of the sta	141
3.42	60 Canwood Before Diversion After Diversion	. 44	8 8 8	127	151	102	105	100	93	70	44	10	2.2	00	00	22	, ·	, ,					938
5.09	50 Mervin Before Diversion After Diversion	44 44	76	77 80	99	45	52	39	10	433	6												391
3.89	66 Spiritwood Before Diversion After Diversion	39	88	124	155	161	152	112	50	13	33	24	- 2	9	0	2							891 989
3,96	56 Leoville Before Diversion After Diversion	45	20	88 83	87	100	55	33	26	20	00	00	00	00	00								512 599
4.02	69 North Battleford Before Diversion After Diversion	∞ ∞	36	44	53	63	61	62	49	200	20	19	41	16	n n	16		9 9	4 4	m m	יט יט		570 639
3.41	68 Meadow Lake Before Diversion After Diversion	25	73	131	171	169	140	124	128	188	191	191	172	154 1	21 17	122	34 1	16 1	19 4	47 5	58 27	209	2,483
2.96	Blaine Lake <sup>c</sup> Before Diversion After Diversion	36	82	111	118	122	104	45	21	133	15	רט רט	9	ოო									681 750
2.53	45 Krydor Before Diversion After Diversion	42	78	91	101	77 87	63	35	ഹര	0 2	2 5												476
4.34	32 Denholm Before Diversion After Diversion	40	103	89	35	28	23	18	10,	12	m m	p p	22	mm									362 529
2.94	62 Hafford Before Diversion After Diversion	46	108	127	111	97	108	86 108	55	49	33	28	18	22 37	13	m m							872
See footnotes	es at end of table																					(con	(continued)

ESTIMATED NUMBER OF QUARTER SECTIONS AND DISTANCE FROM DELIVERY POINT BEFORE AND AFTER DIVERSION, SHELLBROOK-TURTLEFORD REGION, 1969-70 (concluded) TABLE A.1

Total No. of Quarters		348 648	655 1,249	320 695	127	155 861	478	20,285 25,313	25,313
Over 40b								210	210
39 40								64	64
37 38								52	53
35 36		2 2						26	26
33			m				Q	35 95	35
32 %		44	17				0	54 127	127
29 30		00	1 28				12	164	169
27 & 28	1	22	37	Ξ			14	160	161
25 & 26	number of quarter sections		0 48	œ	22	ю	19	281	283
miles 23 & 24	r sec	00	55	34	0 14	19	44	379 583	397 583
Distance in 7 19 21 8 8 8 8	Juarte	06	8 74	31	310	32	56	414	426 672
stanc 19 & 20	of q	45	98	42	0 47	47	55	544 947	569
71 81	umber	4 77	84	5.0	0 4	52	79	742	789
15 % 0	ı	12	8 73	8	0	80	79	909	1016
2 × 4 × 4 × 4 × 4 × 4 × 4 × 4 × 4 × 4 ×		24	29	18	28 0	108	23	1357	1532
12 %		46	93	12	72	116	54 157	2030	2332 2534
0 % 0		53	126	19	8 8	95	91 170	2482 2983	2963
~ ∞ ∞		52	122	47	42 96	24	92 186	2987 2	3749 3502
യ യ		39	118	86 89	42 88	48	153	3160	4286 35 <b>6</b> 0
w ∞ 4		64	16	84 85	18	44	79	Open 2852 2990	4086 2990
L ∞ 2		42	45	45 45	15	32	43	1383 1	2106 4
Delivery Point		31 Richard Before Diversion After Diversion	64 Turtleford Before Diversion After Diversion	47 Speers Before Diversion After Diversion	16 Iffley Before Diversion After Diversion	27 Sandwith Before Diversion After Diversion	46 Medstead Before Diversion After Diversion	Subtotal of Points Remaining Before Diversion 1383 After Diversion 1411	Study Area Total Before Diversion After Diversion
Average No. of Quarters		3.86	4.78	3.76	3.62	3.80	4.13		

<sup>a</sup>Calculated by dividing the average number of acres per permit (mean size shown in Table 2.11) by 160 acres.

<sup>b</sup>Maximum distance was 57 miles at Meadow Lake both before and after diversion.

<sup>c</sup>Blaine Lake is shown as gaining quarter sections from only the Shellbrook-Turtleford Region. Additional quarters were gained from points in the Rosthern Study Region.

TABLE A.2 ESTIMATED NUMBER OF PERMIT HOLDERS AND DISTANCE FROM DELIVERY POINT BEFORE AND AFTER DIVERSION, SHELLBROOK-TURTLEFORD REGION, 1969-70

1969-70 Permits <sup>a</sup>	Delivery Points	- oö (\	ი ∞ ব	യ യം വ	~ ≪ ∞	o ≪ 0	_ <u>~</u>	ا ا مع 4	15 26 16	15 17 19 2 8 8 8 16 18 20 2	19 80 20	22 8 22	23 24	25 26 26	27 8 28	30 80	32 8	33 83	38 35	37	39 40	Over 40c	Estimated Total No. of Permits
	Points Assumed Closed							ī	number o	of perm	permit ho	holders <sup>b</sup> -	.1										
34 1	8 Hatherleigh Before Diversion After Diversion	0.6	11.0	5.0	10.0	10.0	0.5	0.0	0.5	0.5													33°.5
24	3 Bournemouth Before Diversion After Diversion	0.9	7.5	2.5	3.0	1.0	5.0	2.0	2.0	0.5													23.5
32	7 Ordale Before Diversion After Diversion	12.5	14.0	5.0	11.5	10.0																	31.5
27 1	17 Ranger Before Diversion After Diversion	2.0	8.5	6.0	9.0	3.5	0.5	0.5	5.57	2.0													27.0
29	12 Polwarth Before Diversion After Diversion	9.5	8.0	0.5	11.5	0.5	0.5	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5			31.0
104	42 Makwa Before Diversion After Diversion	8.5	22.5	23.0	20.0	13.0	6.5	1.5	2.5	0.5	1.0	1.0	1.0	0.5	15.5	16.5	16.5	15.0	10.5	7.0	4.0	3.0	101.5
20	26 Fairholme Before Diversion After Diversion	7.5	13.5	14.5	5.0	0.0	1.5	4.0	2.0	0.5	0.5	7.5	5.5	3.5	1.5								49.5
38	19 Redfield Before Diversion After Diversion	0.9	12.5	10.0	0.5	1.0	1.5	0.5	0.0	0.5	5.5	1.0	0.5										37.0
54	34 Alticane Before Diversion After Diversion	8.0	15.0	10.5	4.5	5.5	1.0	1.0	13.0	1.0	11.5	5.5	0.0	0.0	0.5								50.5
45	11 Scentgrass Before Diversion After Diversion	6.5	13.0	9.5	6.0	3.0	3.0	1.0	0.0	0.5	0.5	2.0	1.0										45.0
54	25 Robinhood Before Diversion After Diversion	8.0	15.0	11.0	11.0	5.5	0.5	1.0	0.5	0.5	0.0	0.0	0.5										53.0
49	39 Mullingar Before Diversion After Diversion	5.0	13.0	10.0	3.5	5.5	0.9	2.5	0.5	5.0	0.5	10.0	8.0	5.0	4.5	0.5							47.0

TABLE A.2 ESTIMATED NUMBER OF PERMIT HOLDERS AND DISTANCE FROM DELIVERY POINT BEFORE AND AFTER DIVERSION, SHELLBROOK-TURTLEFORD REGION, 1969-70 (continued)

29 31 33 35 37 39 Estimated & & & & Over Total No. 30 32 34 36 38 40 40° of Permits		83.5 0 2.0 0.5 83.5	46.5 46.5	0 1.0	49.5	86.0	51.5	60.5	0 65.5	0 0.5 142.0	0 2.0 1.5 160.0	.0 1.5 0.0 0.0 0.5 1,311.5 .0 20.5 17.0 10.5 7.0 4.0 3.0 1,311.5		
27 2 & 3 28 3		5 4.		.5		ro.			.0 1.0	0 0.	.5 5.	5 26		
25 26 26		.5		0.		0.			0.0	.5 0.	.0	.0 31.		
24 & 33		.55		0		.5			0.5 0	0.00	.0 5	.0 1.		
21 22 22	holders b-	6.5		0.5		6.5 14		.5	0.0	0.0	1.5 11	3.5 5.6		
in miles 19 & 20		3.0		0.0	0.5	20.0 16		3.0	0.5	0.5	6.0 14.	10.0		
istance in 17 & 8	of permit	5.0	0.5	0.0	0.5	6.5 20		6.5	2.0	1.0	1.5	3.0 6.5		
Dist 8 16	number o	7.0 1	0.0	0.0	3.5	1.5	0.5	0.8	0.0	2.5	4.0	25.5 13.0 35.5 128.5		
13 2 8 4 1	nu -	8.5	0.0	0.0	0.5	7.0	3.5	0.9	0.0	5.5	10.5	44.0 2 127.0 13		
11.		5.5	0.5	0.5	3.0	8.0	5.0	3.0	1.0	11.0	18.0 1	80.0 4		
0 % O		7.0	8.5	0.5	3.5	6.5	2.5	7.5	5.5	21.0 1	30.5	24.5 34.5 T3		
~ ∞ ∞		9.5	5.5	3.5	6.5	0.6	6.5	12.5	13.0	28.0	33.5			
യയ		14.5	14.0	9.5	10.0	23.0	11.0	14.5	13.5	32.0	29.5	94.0 1		
ಬ∞್ರ⊄		14.0	14.5	10.0	14.5	22.0	13.0	15.5	19.5	26.0	22.0	osed 322.5 37.0 1		
- ∞ N		9.5	10.0	9.5	10.5	0.6	10.5	9.5	10.5	12.5	10.5	umed C1 190.5 3 7.5		
Delivery Points	(	43 Livelong Before Diversion After Diversion	35 Glenbush Before Diversion After Diversion	14 Brada Before Diversion After Diversion	15 Lilac Before Diversion After Diversion	48 Mayfair Before Diversion After Diversion	8 Tallman Before Diversion After Diversion	38 Whitkow Before Diversion After Diversion	23 Keatley Before Diversion After Diversion	53 Rabbit Lake Before Diversion After Diversion	61 Glaslyn Before Diversion After Diversion	Subtotal of Points Assumed Closed Before Diversion 190.5 322.5 294.0 198.0 After Diversion 7.5 37.0 107.0 136.0	Points Remaining Open	
Actual No. 1969-70 Permits <sup>a</sup>		84	48	37	52	68	51	19	89	147	163	1,340		4

(continued)

TABLE A.2 ESTIMATED NUMBER OF PERMIT HOLDERS AND DISTANCE FROM DELIVERY POINT BEFORE AND AFTER DIVERSION, SHELLBROOK-TURTLEFORD REGION, 1969-70 (continued)

ed 5.												
Estimated Total No. of Permits	37.5 37.5	52.0 52.0	181.0	78.5	36.5	169.5	132.0	184.5	130.5	109.5	233.5	240.0
Over 40°												
39												
37			0.5									0.5
3 3			0.0									0.5
38 83			1.0									1.0
32 83			2.0									1.5
29			0.1								0.5	2.0
27 28 28			1.0								0.5	4.0
25 26 26			11.0					0.5			0.0	7.0
23 24			5.5					2.0		0.5	2.0	0.5
22 8 22	ders <sup>b</sup>		5.5		0.5			3,57		5.5	2.5	2.5
in miles 19 & 20	permit holders		13.5	0.1	5.5			7.5		3.0	9.5	12.5
Distance 1 8 8 8 8 16 18	of perm 0.5 0.5		4.0 1	0.5	2.0	2.5	0.5	12.0	2.5	4.5	6.5	5.11.5
Dist & 16	0.5 0.5		2.0 1	1.0	3.0	1.5	2.5	17.0	2.0	0 0 0 0	0.6	13.0
13 4	- nu 2.5 2.5		12.5	0.0	0.5	9.5	3.0	21.0	 	11.0	24.0	17.0
12 %	3.0	0.1	88.57	7.0	5.5	22.0	18.0	26.0	11.0	2.5	29.0	23.0
0 % 0	3.0		6.5 1	2.0	2.0	32.5	19.5	23.0	16.0	00	31.5	23.5
~ ∞ ∞	3.5 5.55	0.9	6.0 1	4.0 1	7.0	36.0 3	21.0	21.0	27.5	0.9	34.5	26.5
സകര	0 0 0	16.0	12.5	4.0 1	5.0	31.0 3	24.5 2	23.0	31.5	9.0	29.5	33.0
m ∞ 4	8 8	8.0 1	3.0 1	10.6	7.0	26.5 3	22.5	20.0	27.5	16.0 1	24.0	27.5
r- ∞ ~1	66.57	9.5	5.0 1	9.0	ກິດ	8.00	10.5	0.0	10.0	7.0	10.5	13.0
					E			u _		u c		
Points	version	version	version	version	version	version ersion	versio	versio	version	iversic /ersior	iversion	ok iversio
Delivery Points	Mildred Before Diversion After Diversion	Fielding Before Diversion After Diversion	Holbein Before Diversion After Diversion	Vawn Before Diversion After Diversion	Meota Before Diversion After Diversion	Shell Lake Before Diversion After Diversion	Marcelin Before Diversion After Diversion	Borden Before Diversion After Diversion	Radisson Before Diversion After Diversion	Big River Before Diversion After Diversion	Leask Before Diversion After Diversion	Shellbrook Before Diversion After Diversion
Deli	28 Milc Befo Afte	36 Fiel Befc Afte	40 Holb Befo Afte	44 Vawn Befor After	51 Meota Before After	52 She Bef Aft	54 Mar Bef Aft	57 Bor Bef Aft	59 Rad Bef Aft	63 Big Bef Aft	65 Leask Beford After	67 She Bet Aft
Actual No. 1969-70 Permits <sup>a</sup>	40 2	53	192 4	7 98	36	176	137	189	132	110	236	260

TABLE A.2 ESTIMATED NUMBER OF PERMIT HOLDERS AND DISTANCE FROM DELIVERY POINT BEFORE AND AFTER DIVERSION, SHELLBROOK-TURTLEFORD REGION, 1969-70 (continued)

Actual No. 1969-70		oō	m 00 1	15 ത	1 000	ರಾ ಇನ್ನ	= ∞ ;	<u>ო</u> თ თ ფ	10 5 % i	istance 17 8	in mil	es 21 8	C 00 5	1 00 N	27	0,000	E 08 8	m % 8	33	37	0,000	Over	Estimated Total No.
Permits	Delivery Points	7	4	٥	α		7	4-	O Land	- J	7 ÷	holderch-		07	07	30	35	40	20	20	<b>4</b>	204	or rerillits
98	49 Maymont Before Diversion After Diversion	11.5	25.0	24.5	12.0	7.0	2.0		0.0			0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.5		85.0
109	41 Parkside Before Diversion After Diversion	13.0	29.0	27.0	26.0	10.0	2.5	0.5	0.0	0.0	0.0	0.5	0.5										109.0
99	22 Cavalier Before Diversion After Diversion	8 8	10.5	14.5	14.0	80 80 70 70	6.0	2.5	1.0	0.5													65.5
144	58 Edam Before Diversion After Diversion	80 50 50 50	18.0	22.0	26.5	26.0	20.0	13.5	0 0 0 0	1.0	0.0	0.0	0.5										142.0
66	30 Prince Before Diversion After Diversion	10.5	19.0	15.5	12.5	11.5		6.0	ນ ຕ ກ ນ	3.55	5.0	0.0	1.0	0.5									98.0
203	55 Debden Before Diversion After Diversion	10.5	23.5	37.0	39.5	24.5	17.0	16.0	14.5	ထိထ	2.0	0.0	0.1										195.0
40	37 Mont Nebo Before Diversion After Diversion	7.5	14.5	10.0	5.0	0.5	0.0	0.0	0.0	0.5													39.0 59.5
87	20 Hamlin Before Diversion After Diversion	11.0	18.0	15.5	12.5	11.0	7.0	3.0	0.0	0.5	0.5	0.0	5.5	1.5	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	85.0 98.0
35	33 Ruddell Before Diversion After Diversion	10.0	15.0	7.0	1.0	0.0																	34.0
276	60 Canwood Before Diversion After Diversion	12.5	25.5	37.0	44.0	30.0	30.5	29.0	27.0	20.5	13.0	3.0	0.5	0.0	0.0	0.5	0.5	0.5					274.0 297.5
79	50 Mervin Before Diversion After Diversion	8 8 2 2	15.0	15.0	13.0	10.0	10.5		2.0	0.5	2.5												77.0
234	66 Spiritwood Before Diversion After Diversion	10.0	20.5	32.0	40.0	41.5	39.0	28.5	13.0	3.0	9.5	0.5	1.0		0.0	0.5							229.0
See footnotes at	otes at end of table																						(continued)

(continued)
1969-70
REGION,
URTLEFORD
ELLBROOK-1
SSION, SHEL
TER DIVER
RE AND AF
INT BEFOR
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Actual No. 1969-70 Permits <sup>a</sup>	134		147	749	270	185	06	302	60	141	87	36	41
Delivery Points	56 Leoville	After Diversion	69 North Battleford Before Diversion After Diversion	68 Meadow Lake Before Diversion After Diversion	Blaine Lake <sup>d</sup> Before Diversion After Diversion	45 Krydor Before Diversion After Diversion	32 Denholm Before Diversion After Diversion	62 Hafford Before Diversion After Diversion	31 Richard Before Diversion After Diversion	64 Turtleford Before Diversion After Diversion	47 Speers Before Diversion After Diversion	16 Iffley Before Diversion After Diversion	27 Sandwith Before Diversion
30 (1)		.5.	2.0	7.5	12.5	16.5	o o	15.	11.5	<b>6</b> 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7	12.0	9.0	α
L 00 C/	6	20.	တိတိ	5 21.5	0 28.0 5 31.5	5 31.0	5 23.5 5 25.5	5 37.0	0 16.5 5 16.5	5 19.0	0 22.5 0 23.0	0 5.0	:- :-
m ∞ 4.		5 25.5	0 11.0	5 38.5 5 38.5	0 37.5 5 48.5	0 36.0 5 44.5	5 20.5 5 28.5	0 43.0	5 13.5	0 24.5	5 23. 0 23.		г С
യയവ		5 25.	5 13.	5 50.	.5 40.	33	.5 20.	.0 38.	.0 13. .5 16.	.5 25.5 .5 26.0	.5 19.	11.5 11 23.5 26	L
7 8 8	6	0 26.	0 15.	0 49.	.0 41.5	.0 30.0	.5 13.	.0 33.0	.5 13.	.5 26.5	5 5.0.	11.5 2. 26.0 23.	E C
0 % 0	,	0 20.	.5 15.	5 41.0	5 35.	.0 25.0	വാ	.0 29.0	.5 12.0	.5 19.5 .5 26.0	.0 3.	.5 0.	ti Ti
11 1 8 1 12 1	,	000	0 15	0 36.0	0 15	.0 14.0	5 4.	.0 29.	5 13.	5.0.	00	.0 0.	L
w ∞ 4	n n	5 12	5 12.0	5 37.	5 8	0.0	5.0	5 18	010	00	4.5 2 15.0 15	00	
2 % d	0	0.0	0 14.	55.	7.0 4. 8.5 4.	010	.5 1.	.5 16.5	3.0 1	1.5 1	2.0 0	0.0 0.14.0 10.	
17 8 18		00	50.57	.0 56.	ىن تى تى	0.0	.00	.5 11.0	1.0 0.5	1.0 1.0 18.0 21.0	0.0	00	
19 8 20	hol	00	4 4	0 56.0	00	נאימ	5.0	9	5 0	_	0.0 0.0	0.0 0	
		0.0.	.5 10.	.0 50. .5 54.	تىتى			.5 6.0	.00	1.5 0.	0.0	.00	
23 24		0.0	0.0	.5 45.	2.0 1		50.0		0.0	.5 10.	.5 2	.0 0.	
25 & 26		0.0	0.0	00	0.0		5.5	7.5 1	55	.0 0.	.0 3	5.5	
27 & 28		0.0	5 4 4	35.5 36. 51.0 52.				r. 0	500	55.00	0.		
29 30		က်က	0.0	.0 10.				0.0.	0.0	5.5			
37			.5.	.0 4 .5 19					1.0	0 0.			
33 34			ເນຸເນ	نىن					.55	.5			
35 36			0.0	5.5 14					rc rc				
37 38			0.0	14.0 17									
39 40 70			1.5	17.0 61 21.0 64									
Over 7				61.0									
Estimated Total No. of Permits		129.5	142.0	728.0	230.0	188.0	83.5	296.5 362.5	90.0	137.0	85.0	35.0	0.17

TABLE A.2 ESTIMATED NUMBER OF PERMIT HOLDERS AND DISTANCE FROM DELIVERY POINT BEFORE AND AFTER DIVERSION, SHELLBROOK-TURTLEFORD REGION, 1969-70 (concluded)

								-		1				-		-		-					
									Dist	Distance i	n miles	LA											
Actual No.	0.	,	e	70	7	6	Ξ	13	15	17	19 21		23						35	37	39		Estimated
1969-70		ంర	ంర	ంర	ంద	ంర	ంద	ంర		ంర	ంర										<u>~</u> ح	Over	Total No.
Permits	Permits <sup>a</sup> Delivery Points	2	4	9	∞	10	12	14	16	18	20			26	28	30	32	34			40		of Permits
								nu -	mber o	f perm	number of permit holders $^{b}$ -	dersb-											
117	117 46 Medstead Before Diversion 10.5 19.0 22.0 After Diversion 11.0 26.0 35.5	10.5	19.0	22.0	22.0	22.0	22.0 13.0	5.5	1.0	0.5	13.5 14.5 11.5 5.0 3.5 3.0 0.0 1.5	4.5	.5	5.0	3,5	3.0	0.0	1.5					314.5
				)																			
5,578	Subtotal of Points Remaining Open Before Diversion 356.5 740.0 829.5 786.0 654.5 538.5 365.0 244.5 204.5 151.0 116.5 106.0 79.5	Remainin 356.5	19 Open 740.0	829.5	786.0	654.5	538.5	65.0 2	44.5 2	04.5 1	51.0 11	16.5 10	0.90	79.5 4	46.5 47.0	17.0 1	15.5 10.5	0.5	7.5 1	7.5 16.0 19.0 61.5	9.0		5,395,5
	After Diversion	364.0	777.0	936.5	922.0	789.0	671.0 4	192.0 3	80.03	33.0 2	51.0.18	81.5 1	57.5 10	09.5	. 0.8	73.0	6.0 2	7.5 1	8.0 2	3.0 2	3.0		6,707.0
6,918	Study Area Total	547.0	1062.5	1123.5	984.0	779.0	618.5 4	09.0 2	70.0 2	17.5 1	57.5 12	20.0 11	11.0	30.5 4	7.0 4	1 0.8	7.0 1		7.5 1	6.5 1	9.0		6,707.0
	After Diversion 364.0 777.0 936.5	364.0	777.0	936.5	922.0	789.0	671.0	192.0 3	80.03	33.0 2	922.0 789.0 671.0 492.0 380.0 333.0 251.0 181.5 157.5 109.5	81.5 1	57.5 10	09.5 7	78.0 7	78.0 73.0 36.0 27.5	6.0 2		18.0 23.0	3.0 2	23.0 64.5		6,707.0

<sup>a</sup>Same as Table 2.11 with addition of Blaine Lake.

<sup>b</sup>The number of permit holders was calculated from Table A.1 as follows: number of quarter sections divided by the average number of quarters per permit (rounded to the nearest one half permit).

<sup>c</sup>Maximum distance was 57 miles at Meadow Lake both before and after diversion

<sup>d</sup>Blaine Lake is shown as gaining permits from only the Shellbrook-Turtleford Region. Additional permits were gained from points in the Rosthern Study Region.

### Communities Other Than Grain Delivery Points in the Shellbrook-Turtleford Region

Although these studies of economic geography in the prairie provinces are primarily concerned with communities that serve as grain collection points, there is at least an awareness of other social and economic entities or activities in any given region. One of these is the community that is not a delivery point for grain.

Usually it has been found that a list of past and present grain delivery points in a particular area accounts for all existent communities. This, however, is not the case in the Shellbrook-Turtleford region. Table A.3 lists 26 places which are not grain delivery points and notes their several characteristics. Populations range from zero at Midnight Lake to 450 at Green Lake. All but 7 of the communities have post offices. While a map of the study area shows the names of more places that are not delivery points for grain, only those with more than 10 persons living in them or those with postal service are shown.

In the context of rail line and grain handling rationalization, it is interesting to note that none of the 5 communities located on rail lines were ever grain delivery points. It can be said that the 26 communities in Table A.3 do not depend on any grain delivery function for their continued existence.

TABLE A.3 COMMUNITIES OTHER THAN GRAIN DELIVERY POINTS IN THE SHELLBROOK-TURTLEFORD REGION

Community	Class or Legal Status	Populatior 1971	1	Location R.M.	Post Office Revenue 1969-70	Rail Line
					\$	
Barthel	Н	34		L.I.D.	450	-
Beacon Lake Birch Lake	H H	16 160		L.I.D. Medstead	345	CP
Bodmin	Н	22	974.		_	CN
Chitek	H	133		L.I.D.	421	CP
Chitek Lake	Ĥ	131		L.I.D.	-	-
Cochin	Н	163	468.		1,552	-
Dorintosh	Н	87		L.I.D.	1,275	-
Eldred	Н	10		Canwood	-	-
Erin Ferry (Wrix	kon) S H	6 12		Ca <b>n</b> wood L.I.D.	834 332	_
Golden Ridge Green Lake	Н	450		L.I.D.	910	_
Jackfish Lake	H	18		Meota	226	_
Mayview	S	3		Shellbrook	247	_
Metinota	V	11	468.	Meota	-	-
Midnight Lake	L	-		Parkdale	520	-
Morin Creek	Н	13	983.		-	-
Neeb	H	25		L.I.D.	52	CP
Peerless Penn	H(o)	31 2		L.I.D.	657 177	CP
Pierceland	S H	271		Spiritwood L.I.D.	4,618	CP _
Rapidview	Н	32		L.I.D.	323	-
St. Hippolyte	H	20		Turtle River	-	_
Victoire (Shell River)	Ĥ	70		Canwood	804	-
Waterhen Lake	Н	28	980.	L.I.D.	74	
Whelan	Н	12	983.	L.I.D.	156	

L - Area of local interest.

Source: Directory of Saskatchewan Hamlets, Settlements and Other

Unincorporated Areas, Department of Municipal Affairs, Regina, 1972

Population of Unincorporated Settlements, 1971 Census,

Statistics Canada, Ottawa.

Canada Post Office Department, Saskatoon.

S - Settlement with population of 10 or less.

H - Unorganized hamlet with population of more than 10.

H(o) - Organized hamlet.

V - Incorporated village.

TABLE A.4 ALPHABETICAL LIST OF COMMUNITIES AND RANK NUMBER IN THE SHELLBROOK-TURTLEFORD REGION

34 Alticane   1 Hartwell 7 Ordale	
04.5	
24 Bapaume 18 Hatherleigh 6 Ormeaux	
29 Belbutte 40 Holbein 41 Parkside	
63 Big River 16 Iffley 12 Polwarth	
57 Borden 23 Keatley 30 Prince	
3 Bournemouth 9 Kilwinning 53 Rabbit Lake	
14 Brada45 Krydor59 Radisson	
2 Cameo 65 Leask 17 Ranger	
60 Canwood 56 Leoville 10 Redberry	
13 Cater 15 Lilac 19 Redfield	
22 Cavalier 43 Livelong 31 Richard	
5 Cleeves 42 Makwa 25 Robinhood	
21 Crutwell 54 Marcelin 33 Ruddell	
55 Debden 48 Mayfair 27 Sandwith	
32 Denholm 49 Maymont 11 Scentgrass	
4 Dulwich 68 Meadow Lake 67 Shellbrook	
58 Edam 46 Medstead 52 Shell Lake	
26 Fairholme 51 Meota 47 Speers	
36 Fielding 50 Mervin 66 Spiritwood	
61 Glaslyn 28 Mildred 8 Tallman	
35 Glenbush 37 Mont Nebo 64 Turtleford	
62 Hafford 39 Mullingar 44 Vawn	
20 Hamlin 69 North Battleford 38 Whitkow	

# Chronology of Government Legislation, Court Rulings, Board Orders, Regulations, etc., Having an Impact on Production and Marketing of Grain in Western Canada

- Dominion Land Act S.C. 1872, C.6.
- 1876 First export of wheat from the Prairies.
- 1878 St. Paul Railway entered Winnipeg.
- 1881 First elevator built in Western Canada.
- 1881 Canadian Pacific Railway completed between Fort William and Winnipeg.
- 1882 First cargo of wheat left the Lakehead (Fort William).
- 1883 First elevator built at the Lakehead (Port Arthur).
- First all-Canadian rail link (Canadian Pacific) between the Prairies and Pacific Coast opened.
- 1887 Formation of the Winnipeg Grain Exchange.
- An Act to authorize a subsidy for a Railroad through the Crows Nest Pass S.C. 1897, C.5. (Crows Nest Freight rates on western grain moving to Fort William).
- 1899 Royal Commission on the Shipment and Transportation of Grain.
- 1900 Manitoba Grain Act S.C. 1900, C.39.
- Building of the Western portion of the Grand Trunk Pacific to Prince Rupert. (Completed 1912).
- 1904 Grain Inspection Act S.C. 1904, C.15.
- 1905 Introduction of Marquis Wheat.
- 1906 Royal Commission on the Grain Trade in Canada.
- 1908 Winnipeg Grain Exchange reformed to become an unincorporated voluntary association.
- 1911 Act creating the Saskatchewan Co-operative Elevator Company.
- 1912 Canada Grain Act S.C. 1912, C.27. et seq.
- 1912 First Canadian Government Elevator opened at Port Arthur.

- 1914 First Canadian Government Interior Terminal Elevators opened at Moose Jaw and Saskatoon.
- 1915 Panama Canal opened.
- 1916 First Canadian Government Elevator on the Pacific Coast opened.
- United Grain Growers formed from amalgamation of three grain growers associations and the Alberta Farmers' Co-op Elevator Company.
- 1917 Board of Grain Supervisors P.C. 1917-1552 (to June 6, 1919).
- 1919 Soldiers Settlement Act S.C. 1919, C.19. et seq.
- 1919 Canadian Wheat Board Act S.C. 1919, C.9 (to 1922).
- 1923 Royal Grain Inquiry Commission P.C. 1923-774.
- 1923 Prairie Wheat Pools formed.
- 1925 Major revision of the Canada Grain Act.
- 1928 Select Standing Committee of the House of Commons dealt with the grading of wheat by protein content.
- 1929 Hudson Bay Railway completed to Port Churchill.
- 1929 Welland Ship Canal expanded and modernized.
- 1929 Prairie Provincial Governments guaranteed bank loans to the three Wheat Pools.
- 1930 Dominion Government provided financial assistance to the banks and the provincial governments covering grain loans.
- Mr. John I. McFarland appointed by the Federal Government as general manager of the Canadian Co-operative Wheat Producers' Ltd.
- 1930 Revision of the Canada Grain Act S.C. 1930, C.5. et seq.
- 1931 Prairie Wheat Pools separated from their Central Selling Agency, the Canadian Co-operative Wheat Producers Ltd.
- 1931 An Act Respecting Wheat S.C. 1931, C.60. (5¢ freight subsidy).
- 1931 Commission to Inquire into Trading in Grain Futures P.C. 1931-853.
- 1931 Grain Marketing Act S.S. 1931, C.87 (100% pool).
- 1931 First shipment of wheat through Port Churchill.

- 1932 Ottawa Economic Conference Canada obtained preference on wheat in British market.
- 1933 United States legislation, the Agricultural Adjustment Act; parity prices established.
- 1933 Commodity Credit Corporation established in U.S.A.
- 1933 London Wheat Conference and subsequent International Wheat Agree-'ment.
- 1934 Farmers' Creditors Arrangement Act S.C. 1934, C.53.
- 1934 Natural Products Marketing Act S.C. 1934, C.57.
- 1934 Natural Products Marketing Act ruled ultra vires of the Dominion Government by the Supreme Court of Canada.
- 1934 Emergency Wheat Control Act S.M. 1934, C.48.
- 1935 Prairie Farm Rehabilitation Act S.C. 1935, C.23. et seq.
- 1935 Canadian Wheat Board Act S.C. 1935, C.53. et seq.
- 1936 Royal Grain Inquiry Commission P.C. 1936-1577.
- 1938 Canada-United States trade agreement (abrogated British preference on Canadian Wheat).
- 1939 Agricultural Products Co-operative Marketing Act S.C. 1939, C.28. et seq.
- 1939 Grain Futures Act S.C. 1939, C.31.
- 1939 Prairie Farm Assistance Act S.C. 1939, C.50. et seq.
- 1939 Canadian Wheat Board opened Eastern office in Toronto.
- 1940 First implementation of delivery quota system of control over western grain marketing.
- 1941 Wheat Acreage Reduction P.C. 1941-3047.
- 1941 Feed Freight Assistance Regulation P.C. 1941-7523. et seq.
- 1942 Wheat Acreage Reduction Act S.C. 1942, C.10.
- 1942 Veterans Land Act S.C. 1942-43, C.33. et seq.
- Wheat Futures Trading discontinued on the Winnipeg Grain Exchange; Canadian Wheat Board made exclusive marketing agency for wheat.

- 1944 Farm Improvement Loans Act S.C. 1944, C.41. et seg.
- 1944 Agricultural Prices Support Act S.C. 1944, C.29.
- 1944 Canadian Wheat Board Act amended to exempt the Board from authority in marketing Eastern Wheat P.C. 1944-5640.
- The Food and Agriculture Organization of the United Nations Act, S.C. 1945, C.4 et seq.
- 1946 United Kingdom Wheat Agreement.
- 1948 Canadian Wheat Board empowered to control interprovincial movement of wheat products.
- 1948 International Wheat Agreement (No. 1) P.C. 1948-1016.
- 1949 Manitoba Coarse Grain Marketing Control Act R.S.M. 1954, C.41.
- 1949 Saskatchewan Grain Marketing Act R.S.S. 1953, C.241.
- 1949 Alberta Coarse Grain Marketing Control Act S.A. 1949, C.25.
- 1949 Marketing of oats and barley brought under the Canadian Wheat Board.
- Appropriations Act No. 2 S.C. 1951, C.2, provided for a grant of \$65 million to the 1945-49 Pool as settlement to Western grain producers for participation in the United Kingdom Wheat Agreement.
- 1951 St. Lawrence Seaway Authority Act S.C. 1951, C.24. et seq.
- 1951 Prairie Grain Producers Interim Financing Act S.C. 1951, C.20. et seq.
- 1952 Extension of Colombo Plan to wheat aid
- 1953 International Wheat Agreement (No. 2) P.C. 1953-556.
- 1953 Application of accelerated depreciation for income tax purposes to commercial grain storage facilities.
- 1954 Canada-Japan trade agreement extended M.F.N. rates to Japan and opened Japanese market to Canadian grain.
- 1954 Inauguration of United States Public Law 480.
- 1955 Churchill elevator capacity doubled.
- 1955 GATT resolution on surplus disposal.
- Canada-USSR trade agreement extended M.F.N. rates to U.S.S.R., which government agreed to buy 1.2 million tons of Canadian Wheat.

- 1956 First shipment of flour to United Nations Relief and Works Agency.
- 1956 Prairie Grain Producers Interim Financing Act, S.C. 1956, C.1.
- 1956 Temporary Wheat Reserves Act S.C. 1956, C.2.
- 1956 International Wheat Agreement (No. 3) P.C. 1953-734.
- 1957 Prairie Grain Advance Payments Act S.C. 1957, C.2.
- 1957 Establishment of FAO Group on Grains.
- 1957 Agricultural Stabilization Act S.C. 1957, C.22. Succeeded the Agricultural Prices Support Act.
- 1957 Treaty of Rome established the European Common Market.
- First time that the Canadian Wheat Board failed to make a final payment (Oats Pool, 1956-57).
- 1958 Grain Farmers march on Ottawa.
- 1958 Western Grain Producers Acreage Payment Regulations P.C. 1958-1442.
- Bracken Enquiry into the Distribution of Railway Boxcars P.C. 1958-181.
- Supreme Court upheld the Board of Transport Commissioners' ruling that demurrage charges on boxcars is permitted at terminal elevators after ten days.
- 1959 Cabinet suspended Board of Transport Commissioners' ruling on demurrage.
- 1959 International Wheat Agreement (No. 4) P.C. 1959-480.
- 1959 Formal institution of Canada-United States Quarterly Meetings on wheat and related matters.
- 1959 Food for Peace Conference (Wheat Utilization Committee).
- 1959 Bracken formula for boxcar allocation instituted.
- 1959 St. Lawrence Seaway opened,
- 1959 Canadian Wheat Board pricing policy changed to take advantage of new freight conditions consequent on St. Lawrence Seaway opening.
- 1959 Crop Insurance Act S.C. 1959, C.42 et seq. Crop Insurance Test Areas Act S.M. 1959, C.14; the Saskatchewan Crop Insurance Act S.S. 1960, C.57.

- 1959 Royal Commission on Transportation P.C. 1959-577.
- 1960 Prairie Grain Provisional Payments Act S.C. 1960, C.2.
- 1960 Prairie Grain Loans Act S.C. 1960, C.1.
- 1960 Freedom from Hunger Campaign.
- 1960 Western Grain Producers Acreage Payment Regulations, 1960.
- 1960 Addition of Title IV to United States Public Law 480.
- 1960 Canadian Wheat Board instituted off-quota feed mill policy.
- 1961 Railway Act amended to include rapeseed as a grain.
- Report of the Royal Commission on Transportation (MacPherson) recommended branch line abandonment and subsidy to cover losses on grain transport.
- 1961 Agricultural Rehabilitation and Development Act S.C. 1961, C.30.
- 1961 Sale of wheat to China under long term credits negotiated by the Canadian Wheat Board.
- 1962 EEC Ministerial decision implemented the Common Agricultural Policy.
- 1962 Western Grain Producers Acreage Payment Regulations, 1962.
- 1962 Extension of U.S.A. Title IV P.L. 480 provisions to the private grain trade.
- 1962 Canadian dollar value fixed at exchange rate of 92 1/2¢ vis-a-vis the U.S. dollar.
- 1962 Introduction of the European Common Market Grain Regulations, including the import levy system.
- 1962 International Wheat Agreement (No. 5) P.C. 1962-631.
- 1963 Inauguration of the World Food Program.
- 1963 World Food Congress (Freedom from Hunger) Washington, June.
- 1963 Winter Storage Subsidy on feed grain in Eastern elevators paid by Federal government.
- 1963 Sale of 250 million bushels of wheat to U.S.S.R.
- 1964 Kennedy Round of Tariff reductions began, under the General Agreement on Tariff and Trade.

- 1964 Minimum Import Price system applied in the United Kingdom.
- 1964 Export Flour Adjustment policy discontinued by the Canadian Wheat Board.
- 1964 Canadian Wheat Board Headquarters Building expanded.
- 1965 International Wheat Agreement extended by protocol for one year without amendment.
- 1965 Asian wheat production exceeded two billion bushels for the first time.
- 1965 Grain Transportation Committee formed.
- 1966 International Wheat Agreement again extended by protocol for one year to July 31, 1967.
- 1966 Winter Storage Subsidy on feed grain in Eastern elevators cancelled.
- National Transportation Act S.C. 1966-67, C.69. An Act to define and implement a national transportation policy for Canada.
- 1966 Livestock Feed Assistance Act S.C. 1966, C.52. Canadian Livestock Feed Board established.
- 1967 Price and quantity obligations under the International Wheat Agreement ceased; administrative provisions extended until June 30, 1968.
- 1967 Federal Treasury guaranteed price equivalent of \$1.95 1/2 basis
  No. 1 Northern, Lakehead, on Canadian Wheat Board sales of wheat.
- 1967 International Grains Arrangement negotiated under the Kennedy Round and a special Rome Conference.
- 1968 Canada Grains Council formed.
- International Grains Arrangement came into effect July 1. World prices dropped below the arranged minimums; Canadian prices held.
- Prairie Grain Advance Payments Act amended to double the payment rate and to provide advances to cover cost of drying grain.
- 1969 Canadian prices dropped below the IGA arranged minimums.
- 1969 Canadian Wheat Board selling prices to Canadian buyers for domestic use held at the \$1.95 1/2 equivalent level. Two price system.
- Block Loading System instituted by the Canadian Wheat Board as a method of calling forward desired kinds and grades of grain.
- 1970 Canadian dollar unpegged.

- Boden Committee reviewed and reported on the delivery quota system for Western Canadian grain.
- 1970 Canadian Wheat Board inaugurated quota system aimed at making deliveries more selective and market-oriented, and at keeping adequate working space in country elevators.
- Wheat and Barley pools (1968-69) failed for the first time to make a final payment, and for the second time there was no final payment on an Oats pool (1968-69).
- Federal Government Wheat Acreage Reduction Program (Operation LIFT) in effect; wheat plantings down 50%.
- Delivery quota regulations changed to eliminate the unit quota and to move from specified acreage quota to seeded acreage (except for wheat) plus assigned acreage. Each permit holder allowed two delivery points.
- Quota regulations again changed to a completely assignable acreage base, and terminable quotas introduced.
- 1971 Canada Grain Act S.C. 1970-71, C.7, replaced the Board of Grain Commissioners for Canada with the Canadian Grain Commission.
- 1971 Prairie Grain Advance Payments Act amended.
- 1972 The three Prairie Wheat Pools purchased Federal Grain Ltd.
- 1972 Pioneer Grain Co. purchased the 25 licensed grain elevators of Inter-Ocean Grain Co.
- 1972 Manitoba Coarse Grain Marketing Commission established.
- 1972 Alberta Grain Commission established.
- 1972 Canadian Government Elevators inland terminals made alternate delivery points to all permit holders.
- 1973 Canadian Wheat Board opened delivery quotas for all grains on all shipping blocks effective June 4. This was the first time since July 18, 1966 that quotas for all grains were opened and was the earliest date since the 1961-62 crop year, when all quotas were opened April 12, 1962.



